

V I E W
OF THE
R U S S I A N E M P I R E,
DURING THE REIGN OF
CATHARINE THE SECOND,
AND TO THE
CLOSE OF THE EIGHTEENTH CENTURY.

By WILLIAM T O O K E, F. R. S.
MEMBER OF THE IMPERIAL ACADEMY OF SCIENCES AND OF THE
FREE ECONOMICAL SOCIETY AT ST. PETERSBURG.

IN THREE VOLUMES.

VOL. I.

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V I E W

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CATHARINE THE SECOND

OF THE EIGHTEENTH CENTURY



F. R. S.

AND OF THE

ROYAL SOCIETY

IN THREE VOLUMES

VOL. I.

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ADVERTISEMENT.

THE Russian Empire, which in various respects now fixes the attention of Europe, has for several years been the subject of a multitude of investigations and writings, by which the knowledge of that country is considerably improved and enlarged. The care which Catharine the second, from her first accession to the throne, and during the whole of her reign, devoted to the cultivation of this knowledge, has been attended with so much success, that Russia, which, prior to the year 1762, was a sort of terra incognita in our part of the globe, is now in possession of a very considerable store of materials, from which the present state of this remarkable country may be illustrated and described. The first and most important step to the elucidation of the natural and moral condition of Russia was the appointment of the academicians of St. Petersburg to travel for the purpose of exploring its qualities in both these respects; and their journals still form the basis of all that we know with certainty of the internal state of this extensive empire. These important discoveries assisted the zeal of some industrious
a 2 foreigners,

foreigners, who either in the country itself, or by correspondence and connections, collected useful materials, and communicated the result of their labours to the public. By the introduction of the governments, which, besides the beneficial effects they produced on the political administration of the empire, greatly assisted the knowledge of the country, by the admeasurement and survey of the districts assigned them, which facilitated the construction of special charts on a more accurate plan; by the more adequate enumeration of the people, &c. but, above all, by the wise and enlightened publicity with which it was allowed to treat of these matters, this knowledge acquired such a powerful accession, that the idea of a systematical digest of all the necessary materials was no longer to be considered as a vain speculation. Busching, at first, and after him Messrs. Schloetzer, Herrmann, Hupel, and lastly Storch, drew up their topographies and statistics of the empire. Still, however, the voluminous journals of the academicians lay unopened to this country, and the travels of Pallas, Guldenstädt, Georgi, Lepekhin, Falk, the Gmelins, Fischer, and others, were in England known only by the occasional mention of their extraordinary value, with deserved encomiums on the talents and labours of their authors, in the reports of our countrymen on their return from a transient visit to St. Petersburg.

Having passed the greater part of the long reign of the late empress in her dominions, favoured for
many

many years with the friendship and intimacy of two successive directors of the academy*, with free access to its libraries and collections, and being personally acquainted with several of the travellers themselves, I presume to lay before the public this View of the Russian Empire, in which I have faithfully followed the authors abovementioned, and delivered my vouchers wherever it was necessary, as the reader will generally find at the foot of the pages.

I have bestowed much care and pains in the compilation of this work from the learned writers abovementioned and other authentic sources; and this is all the merit to which I pretend; yet would it be the height of arrogance to expect that it can be free from faults: these must be submitted to the indulgence of the reader. And if, amidst the great variety of matter, and the several authors in various languages consulted, I have not failed in rendering it both interesting and entertaining I shall be perfectly satisfied.

Russia, an empire but little known or regarded in the last century, at the opening of the present made her appearance all at once among the states of Europe; and, after a short trial of her powers, became the umpire and the arbitress of the North. The whole system of Europe took another form; the arctic eagle extended her influence to the regions of the Adriatic and the banks of the Tagus,

* M. Domashnef and Katarina Romanovna princess Dashkof.

while the lightning of her eye struck terror into the recesses of mount Caucasus and made the Hellespont tremble. The arts of Europe were transplanted and bloomed both on the shores of the Neva and those of the Irtysh; a new world was opened to commerce; and the sciences, the manners, the luxury, the virtues, and the vices of western Europe have found their way into the deserts of oriental Asia, and to the inhospitable coasts of the Frozen ocean. The æra of these remarkable phenomena was the commencement of the eighteenth century *.

Arrived now at the extreme verge of that period, it must be curious and instructive to look back and compare the two epochas together. To consider what Russia was at the beginning of this century, to see what the successors of Peter have built on the foundation laid by that great and aspiring genius, what progress has been since made by civilization, and what impression the rapid and violent introduction of foreign manners, the settlement of so many thousand foreigners, and the intercourse with foreign nations, have produced.

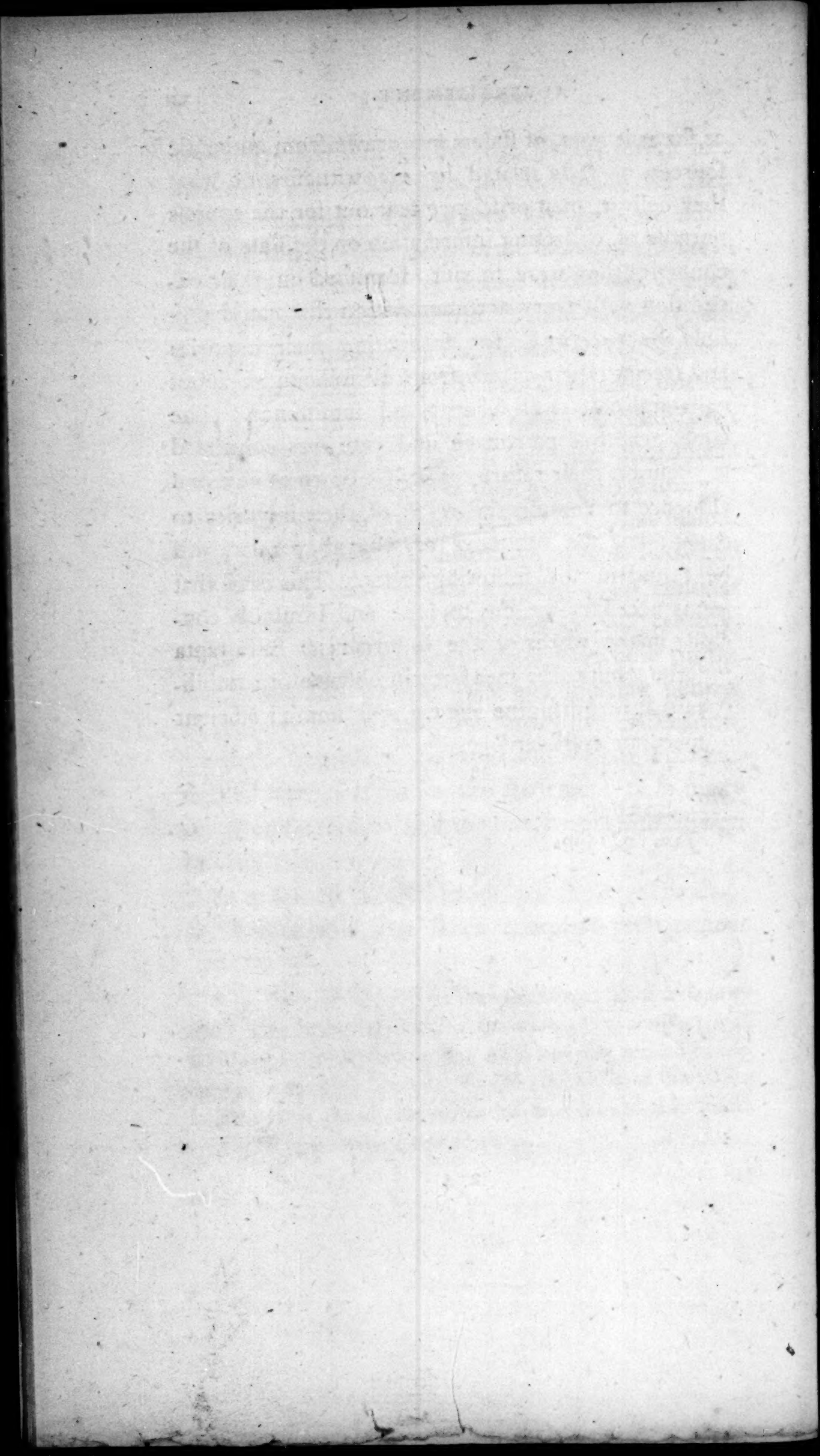
In order to satisfy himself on these particulars, the reader will here see a complete arrangement

* In the year 1697 Peter the Great began his first journey into foreign countries. In 1699 he concluded the armistice with the Porte, by which he acquired Azof, and was enabled to construct a navy on the Euxine. In 1700 the battle of Narva was fought, where the Swedes for the last time shewed their superiority in discipline and the arts of war.

as far as it goes, of statements drawn from authentic sources, of facts related by eye witnesses of what they deliver, men of science sent out for the express purpose of collecting information on the state of the countries they were to visit, furnished on their expedition with every accommodation that could possibly be procured, for facilitating their inquiries and freeing their minds from all sollicitudes about collateral objects of security and subsistence. The same generous patronage and care was continued to them on their return: they sat down in ease and affluence to commit the result of their inquiries to paper; and the substance of what they relate will be found in the following pages. This is all that seems necessary for me to say; and I humbly conclude in the words of the historian: “ Si in tanta
“ scriptorum turba mea fama in obscuro sit; nobilitate & magnitudine eorum, qui nomini officient
“ meo, me consoletur.”

LONDON,

June 20, 1799.



INTRODUCTION.

ABOUT the middle of the year 1767, Catharine II. conceived the useful project of sending several learned men to travel into the interior of her vast territories, to enable themselves to determine the geographical position of the principal places, to mark their temperature, and to examine into the nature of their soil, their productions, their wealth, as well as the manners and characters of the several people by whom they are inhabited.

A country of such a prodigious extent as the russian empire, must naturally attract the notice of every man who wishes to increase his knowledge, whether it be considered in regard to the astonishing number of tribes and nations by which it is inhabited, the great diversity of climates under which they live, or the almost infinite variety of natural curiosities with which it abounds. But the greater part of this country is still immersed in the profoundest barbarism, and almost inaccessible to the investigations of the ordinary traveller. Here vagrant hordes of people, who, entirely addicted to the pastoral life, roam from place to place, shunning the
social

social manners of towns and villages, negligent of agriculture, and leaving uncultivated and almost in a desert-state vast tracts of land blessed with the most favourable soil and the most happy temperature of seasons : there, peasants, and even in many places inhabitants of towns, slaves to a thousand prejudices, languishing in bondage to the most stupid superstitions ; brought up, besides, in the severest servitude, and, being accustomed to obey by no other means than blows, are forced to submit to the harshest treatment : none of those affectionate admonitions, those prudent and impelling motives, which usually urge mankind to action, make any impression on their degraded minds ; they reluctantly labour the fields of a hard master, and studiously conceal from his knowledge those riches which some accident, so desirable in other countries, should have led them to discover ; as they would only augment the number of their toils and the heaviness of their yoke. Hence that careless contempt for the treasures presented them by Nature, and the neglect of those bounties she lavishes on them. Hence those immense deserts almost totally destitute of cultivation and so many towns that are falling to decay.

Peter the Great, of too penetrating a view not to perceive both the evil and its causes, took all imaginable pains, and adopted the wisest measures to ameliorate the condition of an empire, so powerful from numberless other circumstances, to free his subjects

subjects by gentle degrees from the shackles of barbarism, to diffuse on all sides the benign light of arts and sciences, to discover the treasures concealed in his dominions, and to furnish agriculture with the remedies and assistances adapted to its improvement. His travels into several countries of Europe for the acquisition of such kinds of knowledge as were most applicable to the use of his dominions, are sufficiently known; as well as that in 1717 he honoured the royal academy of sciences at Paris with his presence, and expressed his desire the following year to be admitted a member; that he kept up a regular correspondence with that illustrious body, and that he sent to it, as the first essay of his ingenious and magnificent enterprises, an accurate chart of the Caspian, which he caused to be scrupulously taken on the spot. At the same time he fitted out and dispatched several men of letters to various parts of his empire; one of them to make the tour of Russia, and two others to proceed to Kazan and Astrakhan, to gain information of every thing of consequence to be known in those countries. In the year 1719, Daniel Amadeus Messerschmidt, a physician of Dantzic, was sent into Siberia, for the purpose of making inquiries into the natural history of that immense province, from which expedition he only returned at the beginning of 1727. This learned man did honour to the choice that had been made of him, by an indefatigable activity, and by the proofs he gave of his profound knowledge,

ledge, not only in every department of natural history, but likewise in antiquities, as well as in astronomy, having carefully determined the elevation of the pole in all the places where he stopped.

As the northern regions, particularly those of Siberia, were as yet but little known, and as it was very uncertain whether the extremity of these latter might not touch upon America, Peter I. sent from Archangel two ships, with orders to proceed, by the White-sea and the Northern-ocean, into the Frozen-ocean, where they experienced the same disasters as had befallen the other vessels that had gone before them in this attempt; for one of the two was caught by the fields of ice, and disabled from proceeding any farther; and as no tidings were ever heard of the other, it, in all probability, perished. Peter I. was not discouraged by the failure of this undertaking; but he was carried off by death as he was preparing a new expedition; he had given the charge of it to two danish captains, Behring and Spangberg, and a Russian named Tchirikof, with orders to go to Kamtschatka, whence they were to sail for exploring the northernmost coasts of Siberia. The sorrowful event of the emperor's death made no alteration in these dispositions; and the plan was carried into execution, the same winter, by the empress Catharine I. who sent a small company of literati, provided with a paper of instructions, which Peter had framed with his own hand.

They

They returned in 1730, after having penetrated very far towards the north.

The empress Anne was desirous of prosecuting these important researches still farther, and ordered the erection of a new company, in which Behring was to be employed as captain of the ship. Kamtschatka was again the point of departure for making the principal discoveries, with orders to neglect nothing that might shed any light on the knowledge of the globe. One part of this society was to navigate the northern seas, while the others were to repair by land to Kamtschatka over Siberia. These latter were to act conformably with the instructions of the imperial academy of Petersburg, and to employ themselves particularly in astronomical observations, geometrical operations, and descriptions relative to the political and natural history of the countries through which they were to pass.

John George Gmelin was one of the chief of those who undertook the journey by land; almost always accompanied by professor Muller, who had the care of the historical part. They reached as far as Yakutsk; where Krascheninikof, the assistant Steller, the painter Berkhan, and the student Gorlanof, quitted them to go to Kamtschatka, of which they collected the political and natural history, as well as that of the department of Okhotsk. M. de l'Isle de la Groyere likewise went thither with some land surveyors. Afterwards M. Fischer was
sent

sent in the department of political history ; he reached very near to the province of Okhotsk, which he left in the design of returning *.

In 1760, M. l'abbé Chappe d'Auteroche was sent into Russia, by order and at the expence of the king of France, for observing at Tobolsk the transit of Venus over the sun : his observations, published with great ostentation, contain not near so much as was expected from that academician ; and many of those which he relates had been already long since known.

The empress Catharine II. was determined to prosecute these useful investigations, and accordingly gave orders to the academy of sciences to make choice of a company of able and learned men to travel over different districts of the empire with attention and observation. The selection of the learned travellers, the helps that were granted them, the excellent instructions and advice that were given them, will be a lasting honour to that academy. The very names of a Pallas, a Gmelin, and a Guldensædt, already promised much. M. Lepekhin had likewise acquired a reputation by different papers inserted in the academical collections ; and the result of the labours of these enlightened men has been seen in the extensive utility which they have since produced. Very few of the accounts that have

* For more particulars the reader is referred to the preface of Mr. J. G. Gmelin to the first volume of his travels in Siberia which appeared at Gœttingen 1751. A French translation, or rather abstract of it, was given by M. de Keralio, Paris 1767.

been given by travellers contain so great a variety of new and important matters. The journals of these celebrated scholars even furnish such a great quantity of materials entirely new, for the history of the three kingdoms of nature, for the theory of the earth, for rural œconomy, in short, for so many different objects relative to the arts and sciences, that it would require, according to the judicious remark of M. Bekmann of Gœttingen, whole years and the labour of several literary men only to put these materials in order, and properly to class them.

In order to form an accurate idea of the different objects to which our learned travellers were enjoined to direct their observations, it will be necessary to give an account of the instructions delivered to them by the academy at their departure. By these they were to make accurate examinations into —

1. The nature of the soil and that of the waters.
2. the means of putting the desert places into cultivation.
3. The actual state of agriculture.
4. The most common diseases, both of men and cattle; and the methods in use of healing and preventing them.
5. The breeding of cattle, particularly sheep, and that of bees and silk-worms.
6. The fishery and the chase.
7. Minerals and mineral waters.
8. Arts, trades, and objects of industry.
9. They must also apply to the discovery of interesting plants: and,
10. To rectify the position of places, to make geographical and meteorological observations;

servations ; to report all that relates to manners, various customs, languages, traditions, and antiquities ; and mark down exactly whatever they should find remarkable concerning all these points.

All these different views were fulfilled in a superior manner by these gentlemen ; and there is no exaggeration in what has been said, that natural history never at one time obtained so great an increase of its treasures, as by the inestimable fruit of the labours of these truly useful men ; and their narratives are become a lasting monument of their zeal, their uncommon talents, and their unwearied activity.

SAMUEL GEORGE GMELIN, physician of Tubingen, began the course of his travels June 23, 1768, accompanied by four students, James Gliutsharef, Stephen Krasheninikof, Ivan Mikhailof, and Sergèy Meslof ; having with them an apothecary named Joachim Daniel Luther ; Ivan Borissof a draftsman ; Michael Kotof, a hunter by profession, whose business it was to stuff the animals ; and a sufficient escort of soldiers. He directed his rout on leaving Petersburg, through Stararussa, Valdai, Torjok, and Mosco, towards Voronetch ; where he took up his winter quarters, and whence he afterwards passed through Ostrogosk, Pavlovsk, Kazanka, Cimlia and Tscherkask, to Azof. From this last place he set out, about the middle of August 1769, to proceed by Tzaritzin to Astrakhan ; he passed the winter in that city, and only quitted it in June 1770 ; he traversed, in this last half year, in the whole

whole course of 1771, and part of 1772, the north of Persia; visited Derbent, Baku, Schamaky, Entzili, Peribazar, Ghilan, Mazanderan, returned to Entzili, where he passed the winter, and resumed, in April 1772, the route to Astrakhan. The third volume of his Journal closes with the description of these countries. This able traveller was continually obliged to struggle with adverse events, while traversing the northern provinces of Persia; he had especially to contend with sicknesses, and the difficulties thrown in his way by the khans of that kingdom; and he is deserving of the title of a martyr to natural history, with the greater right, as, after having adorned his life with so many labours, he closed it under the weight of persecutions, and in the miseries of captivity*. The greater part of the writings he left behind him were forced, not without great difficulty, from the hands of the barbarians.

PETER SIMON PALLAS, M. D. and professor of natural history, long famous in that branch of knowledge, took his departure from St. Petersburg

* He was seized upon at 90 versts from Derbent, in the district of Usmey-khan, and there actually died in prison. The empress gave a gratification to his widow, after this deplorable event, by granting her one year's pay of the salary she had assigned to her husband during his travels, consisting of 1600 rubles. If the worthy Gmelin had not undertaken his second and unfortunate journey into Persia, rather as a merchant than as a literaryman, and if he had not constantly gone by land, he would not easily have fallen into the hands of Usmey-khan.

towards the middle of June 1768. In his progress he visited Novgorod, Valdai, Mosco, Vladimir, Kazimof, Murom, Arfamas, the country extending between the Sura and the Volga, and wintered at Simbirsk, of which he examined all the adjacent parts. The 10th of March 1769, he turned off to Samara, Syzran, Orenburg, crossed the countries watered by the Yaïk, and repaired to Gurief-gorodok, which seemed then to be the general rendezvous of our academical travellers. Here he met, among others, the unfortunate professor Lovitz *, who had just established his observatory, his assistant Ichonodzof, and lieutenant Euler: M. Lepekhin was also at that time in the neighbourhood of Gurief. M. Pallas employed himself, during the whole of his stay in this place, in examining the coasts and the isles of that part of the Caspian that lay within his reach. Hence he returned by the same road, in order to go, by the way of Orenburg, to Ufa,

* M. Lovitz lost his life in a dreadful manner, during the time that the rebels, who produced so much confusion in Russia in the preceding war against the Turks, were ravaging the colonies of the evangelical brethren. Our naturalist was taken at Dobrinka, where he thought himself in the greatest safety. A band of these rebels dragged him as far as the borders of the Slovla, where their chief had his quarters; and, in the month of August 1774, he was there first impaled alive, and afterwards hanged. The assistants of Lovitz, Ichonodzof and his son, having found means of escaping, saved all his writings and a part of his instruments. Several farther particulars relating to this learned traveller, may be seen in Busching's *Wochentliche nachrichten*, 1775, p. 56 & sqq.

where

where he arrived the 2d of October; and after having spent there the winter, he set out, the 10th of March 1770, for the mountains of Ural, and the province of Iſſet: the 23d of June he reached Ekatarinenburg, where he made his observations on the great number of mines that are worked in that district; he proceeded afterwards to the fortress of Tſcheliabinsk, whence, about the middle of December, he took his course to Tobolsk. M. Pallas had sojourned the greater part of the winter at Tſcheliabinsk, and traversed and examined, partly by himself and partly by his assistant M. Lepekhin, and by professor Falk, almost all the government of Orenburg, when this latter also came, about the middle of March 1771, followed shortly after by his assistant Georgi, to join him in this town of Tſcheliabinsk. Captain Ritschkof, who had hardly quitted M. Pallas all the winter, now left him, and set out upon another journey.

M. Pallas finally left his winter-quarters at Tſcheliabinsk the 16th of April 1771, directed his course by the Omsk, followed the course of the Irtyſh, visited the mines in the environs of Kolyvan, went to the Schlangenberg (or serpentine mountains) and to Barnaul; where he found Mr. Falk sick, who was come from Omsk by the steppes or deserts of Barabin. From Barnaul M. Pallas proceeded to Tomsk, and arrived the 10th of October 1771 at Krasnoyarsk upon the Yenissey, which he had made choice of for his winter-quarters. It was there that

the student Suyef came up to him again, in the month of January 1772; he had made, in the course of the last summer, a journey the length of the Oby towards the Frozen-ocean, and was returned to communicate his observations to M. Pallas, who was again joined, in the month of February, by M. Georgi, who had hitherto served as assistant to M. Falk, and afterwards by the students Bykof, Kaschkaref, and Lebedef, whom M. Falk, forced by the bad state of his health to return, had sent to M. Pallas.

Our learned traveller left his winter-quarters the 7th of March 1772, to proceed, with M. Georgi and two students, by Irkutsk to the lake Baikal, whither he had already sent M. Sokolof in the month of January. After having seen the environs of that lake, Selinginsk and Irkutsk, he regained, the 12th of July, the route of Krasnoyarsk, where he set up his winter-quarters, after having visited the Sayane mountains. In the month of January 1773, they set out on their return, in which they took the way of Tomsk, Tara on the Irtysh, Kazan, Sarapul, Yaitskoi-gorodok, Astrakhan, and through the country that borders the Sarpa to Tzaritzin, where he met again M. Sokolof, whom he had sent to visit the steppe or desert of Kuman. After having wintered at Tzaritzin, and made several excursions from that city towards the Volga, he returned at length by Mosco to St. Petersburg, where he arrived the 30th of June 1774.

We

We see, by this short sketch of M. Pallas's travels, that he went over a great part of the same countries which the first, third, and fourth volumes of the travels of J. George Gmelin had described. But this ought not to induce us to regard the labour of M. Pallas as a repetition, which might easily have been dispensed with; the plan of M. Gmelin differed entirely from his, and was incomparably more contracted, as to the department of natural history. Besides, professor Pallas took quite other courses than those of M. Gmelin: and Siberia had in the interval acquired an altogether different face, as well by the extension of its frontiers as by the establishments that have increased its population, by the new and important mines that have been put in produce, and the founderies that have been erected there; so that it cannot fail of gaining infinitely by any comparison that might be made between his accounts and those of Gmelin.

JOHN AMADEUS GEORGI, member of the society of natural history at Berlin, was at first destined by the imperial academy to relieve professor Falk, who was commissioned with what was called the expedition of Orenburg, and then known to be in a bad state of health. He set out in consequence, the 1st of June 1770, took the route by Mosco and Astrakhan, and met M. Falk in the steppe of the Kalmuks, very near to an armenian caravan. He followed him across that steppe to Uralsk (at that time Yaitskoi-gorodok) and to Orenburg, where they remained till the end of the year. At the beginning of

1771, they travelled by consent into the province of Iſſet, M. Falk along the lines of Orenburg, and M. G orgi by the Baſchkirèy and the Ural. He took, during the illneſs that detained M. Falk, ſeveral little journies from Tſchelyœba, capital of the province, towards ſeveral places, for obſerving a variety of natural curioſities, and the nations of the country; finding themſelves at length in a capacity to continue their courſes, at the latter end of June M. Falk proceeded by Iſetſkoi to Omſk on the Irtyſh, and directed M. Georgi to come and join him at the laſt-mentioned place by the new lines of Siberia, or of Iſchim on the frontiers of the Kirghiſes. They then proceeded in company acroſs the ſteppe of Barabin, to ſee the ſilver mines of Kolyvan near the Oby. They went alſo afterwards to viſit Barnaul, and, as much as a ſerious malady, with which M. Falk was attacked anew, would permit, the mountainous diſtrict of the mines of Altay, and the founderies that depend on Barnaul. Towards the end of November they continued their journey, following the firſt elevations of mount Kuſnetſk, to Tomſk. It was in this city that M. Falk received from Peterſburg a permiſſion to return, on account of his ill ſtate of health. M. Pallas, the chief of the expedition, now remaining alone in the vaſt regions of Siberia, M. Georgi, as we have already ſeen, was entered of his company, and travelled, though ſeparately, under his direction.

We shall here give a short intimation of the places visited by M. Georgi: from Irkutsk he proceeded to the lake Baikal, of which he drew an excellent chart, and thence into Daouria, for the purpose of examining the mines of that name, and into the district of the mines of Arguslin: thence he returned by Irkutsk to Tomsk, Tara, Tobolsk, Isetskoi, Ilina, Ekatarinenburg, and Ufa, visiting all the mines of those countries; he returned thence by Perme, on the Ural of the Baschkirs; once more from Ufa to Tzaritzin and Orenburg; and lastly along the Volga, from Astrakhan to Petersburg by Saratof, Bolgari, Kazan, Makarief, Pavlova, Nishney-Novgorod, Yaroslavl, and Tver. On the 10th of September 1774, he arrived in the imperial residence.

On coming to Kazan in March 1774, M. Georgi found professor Falk still there, and extremely ill, which illness he terminated, together with his life, by his own hand a few days after. Two or three particulars of his biography * will not be disagreeable to the reader.

M. FALK was born in Westrogothia, a province in Sweden, about the year 1727. He studied medicine in the university of Upsal, and went through a course of botany under the celebrated Linnæus, to whose son he was tutor. He publicly defended the dissertation † which that famous botanist had

* From the Journal of M. Georgi.

† In the collection known under the title of *Linnæi amœnitates academicæ*.

composed on a new species of plants, which he called *Astromeria*. In the year 1760, when M. Georgi for the first time was at Upsal, the latter was already so deeply affected with depression of spirits, that M. de Linné, in the view of obliging him to take exercise and dissipation, sent him to travel over the island of Gothland, to make a collection of the plants it produces, and the various kinds of corals and corallines which the sea leaves on its shores. This voyage was attended with no diminution of his distemper, which found a continual supply of aliment in a sanguine melancholy temperament, in a too sedentary way of life, and in the bad state of his finances.

Professor Forskael having left Upsal for Copenhagen in 1760, Falk followed him thither, in the design of applying, by the advice of M. de Linné, to be appointed assistant to M. Forskael in his famous journey through Arabia; but, notwithstanding all the pains that M. Ceder and several other men of literary reputation at Copenhagen took in his behalf, his application failed, as the society that were to go on that important expedition was already formed. Obligated, with much discontent, to return, he enriched as he travelled and enriched the *Flora Suecica* with several new discoveries.

A man in office at St. Petersburg, having written to M. Linné to send him a director for his cabinet of natural history, M. Falk accepted the post, which led him to the chair of professor of botany at the apothecary

apothecaries garden at St. Petersburg, a place that had been vacant from the time that it was quitted by M. Siegesbek. His hypochondriac complaint still continued to torment him. When the imperial academy of sciences was preparing in 1768 the plan of its learned expeditions, it took M. Falk into its service, though his health was uncertain. He was recalled in 1771; but, having got only to Kazan in 1773, he there obtained permission to go and use the baths of Kitzliar, from which he returned again to Kazan at the end of the year with his health apparently better.

But his disease soon returned with redoubled violence. From the month of December 1773, he had never quitted his bed, nor taken any other nourishment than bread dried in the swedish manner (knækebrød), of which he scarcely took once a day some mouthfuls dipped in tea. At first he received the visits of a few friends; but afterwards denied himself to them, and was reduced to the strictest solitude. When M. Georgi went to see him, nothing seemed left of him but a skeleton of a wild and terrifying aspect. The few words he drew from him consisted in complaints occasioned by a host of diseases which kept his body in torture, and threw him into the most cruel sleeplessness. The last evening M. Georgi kept him company till midnight. He spoke little, and said nothing that could give reason to suspect the design he was meditating. His hunter, and at the same time his trusty servant, offered

offered to sit up with him the night ; but he could not be persuaded to consent.

M. Georgi being requested the next day, March 31, to come to the lodging of the unfortunate gentleman, he found him lying before his bed, covered with blood ; beside him lay a razor, with which he had given himself a slight wound in the throat, the fatal pistol and a powder-horn ; all together presenting a tremendous spectacle. He had put the muzzle of the pistol against his throat, and, resting the pommel upon his bed, he discharged the contents in such manner, that the ball having gone through his head, had stuck in the ceiling. His soldier had seen him still sitting up in his bed at four o'clock, at which time he usually fell into a short slumber. In his chamber was found a note written the evening before, betraying throughout the distracted state of his mind, but nothing declaratory of his design, or that was of any importance.

M. Falk, like all hypochondriac persons, was not very communicative, and on certain occasions was distrustful. But at the same time he was of a sedate temper, complaisant, and upright, which made it a very easy matter to bear with him, and secured to him the indulgence of all his acquaintance. His extreme sobriety had enabled him to make some savings from his pay, though he was very beneficent ; it was not therefore indigence that drove him to this act of violence. He was of
a cold

a cold constitution, preferring solitude and quiet to society, to the company of his friends, and to ordinary amusements, which yet he did not shun, except in the latter period of his life. As to religion, he shewed on all occasions more respect for it, than any strong effusions of zeal. It was solely to be ascribed to the violence of his distemper, and the weakness of mind which it brought on, that led him to put a period to his days. The fate of this unfortunate scholar was generally and justly lamented*.

In the number of those who were of the expedition of M. Pallas was also captain NICHOLAS RYTSCHKOF, son of Peter Ivanovitch Rytschkof, counsellor of state, who made himself famous for his topography of Orenburg. Rytschkof the son, in 1769, went over some districts of the governments of Kazan and Orenburg; proceeded eastwards from Simbirsk, and thence northwards beyond the Kama, declining afterwards to the north-east along the Ural mountains, which he traversed in his way to Orenburg. In 1770 he visited the coun-

* His papers were found in the greatest disorder. They contain, however, very useful and important relations. He particularly made it his business to inquire about the Kirghises and other tartarian nations: and as he frequently remained for the space of nine months together in the same place, he was enabled to procure satisfactory notions concerning the objects of his investigations. The imperial academy, in 1774, appointed professor Laxmann to arrange his manuscripts in order for publication; which was done accordingly.

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tries extending the length of the western bank of the Bielay, quite to the Kama, which he coursed as far downwards as Kazan; then, crossing the province of Viatka, he passed on to Glinof, came into Perme, and surveyed the environs of Solikamsk: thence descending along the Kama nearly as far as Kungur, he proceeded by Ekatarinenburg to Tschelyabinsk. In 1771, on departing from Orsk, he visited the steppe of the Kirghis-kozaks on this side the Yaïk, passed the rivers Irgis and Turgai, came as far as the mountains of Ulu-tau, thence bore away to Ust-visk and Orenburg, and came at last, by a part of the province of Ufa, quite to the Dioma.

M. LEPEKHIN, by birth a Russian, who, after having gone through his first studies at the imperial academy of sciences at St. Petersburg, went to pursue a course of medical study at Strasburg, where he was admitted M. D. and was received in 1768 as adjunctus, and in 1771 member of the same imperial academy, was at the head of another of these expeditions. He set out the 8th of June 1768, from Petersburg, and proceeded straight to Mosco; thence by Vladimir, Murom, Arsamas, Alatyr, consequently by the government of Nishney-Novgorod, to Simbirsk in the province of Kazan: from which place he set out in the month of August, to visit the course of the river Tscheremschan, which divides the government of Kazan from the province of Stavropol, and thence travelled over
various

various parts of the government of Orenburg. In autumn he reached Stavropol, passed the winter at Simbirsk, and the spring of 1769 in the province of that name: the following summer he came to Astrakhan; from which city, in the month of August, he made an extremely remarkable journey to Gurief, crossing the steppe which extends between the Volga and the Yaik; from Gurief he went up along the Yaik as far as Orenburg, and reached in the month of October the little town of Tabynsk situate near the centre of the Ural of Orenburg on the river Bielaya, where he wintered. In the month of May following, he pursued upwards the course of the Bielaya, examined the mountains, came in July to Ekatarinenburg, struck forwards into the Ural, and attained, beyond the Kungur, to the summit of the highest of the Ural of Orenburg, whence he returned to Ekatarinenburg, and passed the winter at Tiumin in the province of Tobolsk.

In the month of May 1771, he reached the summit of the highest mountain of the Ural-chain, which runs between Verkoturia and Solikamsk, visited, during the summer, the province of Vjatka, proceeded by Ustiug to Archangel, where he embarked in order to examine the coasts of the White-sea. He made Archangel his winter-quarters that year. The following year, 1772, was employed by our learned traveller in making a second course on the sea just mentioned, along the shores and the isles lying to the left of Archangel, as far as the western and northern coasts, proceeding thence to the mouth
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of the White sea : he afterwards doubled Kanin-nofs, and at length returned by the gulph of Mezen to Archangel, whence he fet out, towards the close of the year, for St. Petersburg. During the spring and summer of 1773, he visited the environs of Pfcove, Velikiye-Luki, and Toropetz, with divers other parts of the governments of Pfcove and Mohilef : in the month of August he went from Polotsk along the Duna to Riga ; whence he proceeded, following the sea-shore, to Pernau, then to Valk, Neuhausen, and Pfcove : after which he returned in December to St. Petersburg, and probably thus terminated the travels on which he was sent.

Dr. J. GULDENSTÆDT took his departure about the middle of June 1768, from St. Petersburg, in order to proceed by Novgorod along the western coast of the lake Ilmen, by Porkof, Staraia-russa, and Toropetz, to Mosco, where he tarried from the 11th of September to the 8th of March 1769 ; when he set out for proceeding by Kolomna, Epifani, Tula, and Eletz, to Voronetch ; thence to Tavrof, to Tambof, to the fortrefs of Novochopefskaia ; and, after having coursed along the rivers Chopra, Medvieditza, and the banks of the Don, he arrived the 11th of October at Tzaritzin, where he remained till the 23d of November : he afterwards went to Astrakhan, where he arrived the 4th of December, and then proceeded to Kitzliar, a Russian frontier town on the river Terek. This place he quitted in 1770, to visit the countries wa-
tered

tered by that stream, by the Kunbalni, the Soon-tscha, the Akfai, and the Koifa, with the north-east parts of mount Caucasus; being often obliged in this course to return to Kitzliar, chiefly because of the little safety he found in traversing those parts. It was for this reason, and on account of an illness that detained him, that he did not reach Georgia that year.

The 10th of February 1771, M. Guldenstædt left Kitzliar, with a detachment of russian troops, for Offetia, which is a district of mount Caucasus; and so soon as the 17th of March he was already returned to Kitzliar, which he quitted for the last time the 18th of May, in order to go to the hot baths on the borders of the Terek. One of the most considerable of the princes of the lesser Kabarda accompanied him, and shewed him, during the months of July and August, all that country, with the northern part of the caucasean mountains inhabited by the Dugores. Thence he returned a second time to Offetia on the Terek, whence he departed the 11th of September under the escort of some hundreds of Offetians, whom the tzar Heraclius had taken into his pay, and happily arrived with them in Georgia. He was, the 25th of September, at Duschet, a town of Karduelia. The 9th of October he left that country, in order to proceed to the river Kur, at the same place where tzar Heraclius had appointed his troops to make their general rendezvous, and which was only fifteen versts distant from

from Teflis, its capital. It was there that M. Guldenstadt had an audience in form of the tzar, who embraced him, made him sit down in his presence, and promised to grant him every assistance that he should want; which promise he afterwards fulfilled. He made the campaign with the tzar, who pushed with the main body of his army to the distance of above a hundred and twenty versts up the course of the Kur; and he returned to Teflis with that prince the 14th of November. He left this place again the 21st of February 1772, for Kakhetia, always in the suite of the tzar, and passed the whole of the month of March in that province of Georgia. He traversed, in the month of May, those provinces of Turcomania which are in subjection to tzar Heraclius. The 20th of June he went, for the last time, to Teflis, in the resolution of quitting Georgia, after he should have made the tour of the provinces of tzar Solomon, and to return to Mosdok on the river Terek. On the 18th of July he made his obeisance to that tzar, who had set up his summer-camp on the southern bank of the river Rion, some versts below the fortress of Minda. The prince gave our traveller a very gracious reception. The 5th of August 1772 he quitted the district of Rad-scha, which makes part of the kingdom of Immeretia, and repaired to Kutatis, the capital of the lower Immeretia; then made the tour of the frontiers of Mingrelia and Guria, the eastern part of Immeretia and middle Georgia. Tzar Solomon
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had given him an escort of three hundred Immere-
tians to attend him on his tour. As he was prepar-
ing to proceed farther on, he was forced for some
time to suspend his march, as the greater part of
his people had fallen sick. In this interval he re-
ceived a supply of men, horses, and provisions,
from a georgian nobleman whom a little before he
had cured of an ailment. On the first of October he
reached the last grufinian or georgian village, where
he was again obliged to stop for a month, in conse-
quence of advices that he received of three hundred
Affetinians who were waiting on the shore of the
Terek to attack and to plunder him. In the interim
the major-general of Medem, being informed of
his situation, sent a detachment of six hundred men
with two pieces of cannon, at the arrival of whom
the robbers dispersed. By this means M. Gulden-
staedt happily regained the frontiers of Russia, and
returned first to Mosdok, and afterwards to Kitzliar.
In April 1773, he made an excursion to Petersbade
[the baths of Peter], whence he returned the suc-
ceeding month and immediately set out for Mosdok,
and in the month of June went upwards along the
Malka. From that river he turned off towards the
eastern branch of the Kuma, and proceeded to the
five mountains or Besch-tau, which form the highest
part of the first elevation of Caucasus: he visited
the mines of Madfchar, from which he took the
route of Tscherkask, where he arrived the 24th of
July. From this last town he made a tour to Azof;
VOL. I. C being

being returned to Tscherkask, he proceeded by Taganrok along the sea-coast, crossed the river Kalmius, following at the same time the Berda and the new lines of the Dniepr, and came by the eastern bank of that river to Krementschuk, the capital of the government of New-Russia, where he arrived the 7th of November, and passed the rest of the winter. He had not yet quitted this government, though already on the way to the Krimea, when he received orders on the 20th of July 1774, as did all the other academical travellers, to return to St. Petersburg. Accordingly he turned back, and came by Krementschuk, and along the lines of the Ukraine as far as Bielefskaia-krepost; thence bent his course over Bachmut, and beyond towards the south-east and the east, as far as the rivers Mius and Lugantschik. Being returned to Bielefskaia-krepost, he left it for the second time the 16th of December, and came by Kief to Serpukof; where, having collected all the persons and all the effects belonging to his expedition, he took his departure the 20th of December for Mosco, and in the course of March arrived at St. Petersburg*.

Such is the general outline of these interesting travels from which the learned of Europe have received so much information, and which properly finds a place in the introduction to a work that

* See Bachmeister's Russische Bibliothek, tom. i. ii. and iii. where very circumstantial accounts of all the several courses pursued by these travellers are to be found.

owes so great a part of its materials to the labours of these academicians. The discoveries made by the Russians at sea at various epochas, and particularly during the reign of Catharine II. have been so faithfully laid before the public by Mr. Coxe in his well-known work professedly written on that subject, that it would be unnecessarily swelling the bulk of these volumes to say any more of them here. However, it is impossible to take leave of these expensive and important missions without testifying our acknowledgment, with that ingenious and candid writer, of the benefits that have accrued to science from these learned and laborious investigations, and to join with him * and every friend to rational inquiry, “ in the warmest admiration of
 “ that enlarged and liberal spirit, which so striking-
 “ ly marked the character of the late empress of
 “ Russia; who, from her accession to the throne,
 “ made the investigation and discovery of useful
 “ knowledge the constant object of her generous
 “ encouragement. The authentic records of the
 “ russian history were by her orders properly ar-
 “ ranged; and permission was granted of inspect-
 “ ing them. The most distant parts of her vast
 “ dominions were at her expence explored and de-
 “ scribed by persons of great abilities and extensive
 “ learning; by which means new and important
 “ lights have been thrown upon the geography and

* Coxe, Russian discoveries between Asia and America, preface, p. xi.

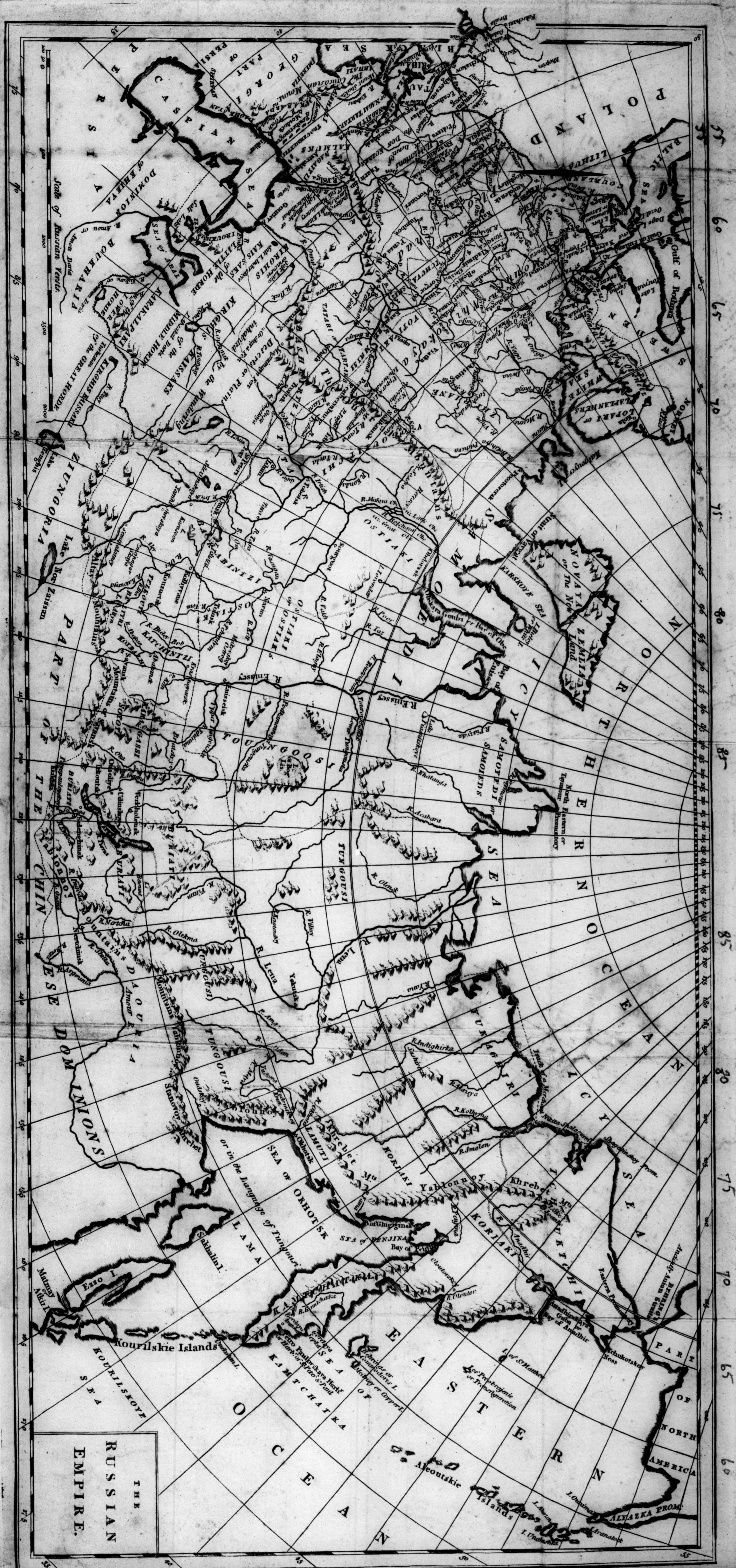
“ natural

“ natural history of those remote regions. In a
 “ word, this truly great princess contributed more
 “ in the compass of only a few years, towards ci-
 “ vilizing and informing the minds of her subjects,
 “ than had been effected by all the sovereigns her
 “ predecessors since the glorious æra of Peter the
 “ great.”

ERRATA.

- Vol. I. p. 285. line 6 of the note, for *call* read *called*.
 318. line 22. for *contradiction* read *contradistinction*.
 340. line 21. for *Yammula* read *Yammala*.
 379. line 11. for *also* read *therefore*.
 Vol. III. p. 55. line ult. for *masbines* read *meshes*.
 p. 222. line 20. for *it* read *them*.

VIEW



V I E W

OF THE

R U S S I A N E M P I R E.

B O O K I.

OF THE NATURAL STATE OF THE EMPIRE.

SECTION I.

Amplitude, boundaries, and division of the empire.

By Russia is sometimes understood the whole russian empire; yet these two expressions have properly a very different signification. Russia proper implies those principalities and provinces which for many ages past have been inhabited by Russians*; and the following are its divisions, namely: 1. Great Russia, which has always bore the name of Russia

* For about 1300 or 1400 years, as far back as authentic history reaches: this however is principally to be understood of Great and Little Russia.

in the strictest import *, and comprises those large tracts of country, principalities, viceroyalties, and dukedoms which have uninterruptedly composed the russian dominion; as Mosco, Vladimir, Novgorod, Pscove, Perieslaf, Riasanskoi, Kaluga, Tula, Yaroslaf, Kostroma, Tver, Vologda, &c. 2. Little Russia, comprehending the Ukraine †, or in general the present three governments of Kief, Tschernigof, and Novgorod-Sieverskoi ‡. 3. White Russia, by which, for a long period of time, was meant the principality, or the present government of Smolensk; to which are now added the two governments of Polotzk and Mohilef, still sometimes called the white-russian territory: otherwise the name of White Russia is no longer heard of. To these were added, 4. New Russia, by which were denoted the large tracts of country near the Ukraine, towards Poland and the turkish dominion; namely, New Servia and the province St. Elizabeth, which now belong to the government of Ekatarinoslaf, and therefore its name has fallen into disuse. — The three last have not always been united with Great Russia.

But, by the russian empire, is likewise understood, not only those just mentioned, but also such king-

* To take notice of its old obsolete names is the province of the antiquarian; and here would be out of place.

† Which word signifies *the borders*.

‡ It was long separated from Great Russia; but united to it again in 1654.

doms, countries, and provinces as have been at various times since added to it by conquests and appropriations; as, 1. The kingdom of Kazan, which was conquered by tzar Ivan Vassillievitch in 1552, at present consisting of several governments. 2. The kingdom of Astrakhan, taken by the same monarch *; at present likewise divided into several governments. 3. The vast country of Siberia; which, by calculation, contains upwards of ten millions and a half of square versts, comprehending within it several kingdoms, taken by roving Kozaks on their own account, and then surrendered to the tzar, who completed the conquest; this at present consists of several, but those the most extensive governments. 4. The provinces on the shores of the Baltic, captured from the Swedes by Peter I. and for ever incorporated with the russian empire by two treaties of peace: Livonia, Esthonia, Finland, and Ingria, or the present governments of Riga, Reval, Vyborg, and St. Petersburg. 5. The countries taken from Poland, now the governments of Polotzk and Mophilef, which the empress Catharine II. united to the empire. 6. The territory she annexed to Russia by the peace concluded with the Turks in 1774. 7. The Krim and the Cuban, or the province of Taurida and the government of Caucasus, united to the empire by that sovereign in 1783. 8. The tributary islands in the eastern

* Kabarda, likewise, soon afterwards submitted.

ocean, now added to Russia. 9. The countries that have more recently submitted to the russian supremacy, namely, Kartuelia or Kartalinia, &c. 10. The possessions in America, consisting partly of islands, partly of the continent of California, where the principal establishment is called Donalesk. 11. Some other countries incorporated with the empire at various periods; as, the Kirghis-kozaks, of the middle and little horde, who submitted themselves in 1731, and several others.

Hence it appears that the russian empire has not always been of such magnitude as at present. Even in the thirteenth century Lithuania was not so far from Mosco * as now. From this slight inspection it is manifest that the amplitude of the empire is far greater than that of the largest monarchy in ancient or modern times. Accordingly, the empress, in her letter of grace to the russian nobility in 1785, expresses herself in the following manner: “ The
 “ russian empire is distinguished on the globe by
 “ the extent of its territory, which reaches from
 “ the eastern borders of Kamtschatka to beyond the
 “ river Duna which falls into the Baltic at Riga:
 “ comprising within its limits a hundred and sixty-
 “ five degrees of longitude; extending from the

* The proper name of this capital is Moskva; but Mosco is grown into such familiar use by long established custom, that we should no more think of altering it than of reducing Warsaw to its right name of Varschau, or calling the Tartars by their proper name Tatar.

“ mouths of the rivers Volga, Kuban, Don, and
“ Dniepr, which fall into the Caspian, the Palus
“ Mœotis, and the Euxine, as far as the frozen
“ ocean, over two-and-thirty degrees of latitude.”

The same number of degrees is assigned it by this sovereign, in her instructions to the commission for framing a code of laws. But, from her own words, it plainly appears, that she only takes notice of the countries contiguous to each other, according to the general extent; but none at all of the islands, or the numerous promontories and points of land that strike out from them. The islands in the eastern ocean are not once mentioned. Even the isle of *Æsel*, with its western promontory, reaches several degrees farther than the river *Duna*. If we take all these into the account, the russian empire, according to the newest and best charts, will be found to extend from about the forty-third to the seventy-eighth degree of north latitude; and from the thirty-ninth to the two hundred and fifteenth degree of longitude; this last however including the islands lying in the eastern ocean.

Without reckoning the islands, the empire extends in length above 9200 english miles, and in breadth 2400. — From *Riga* to *Anadyrskoioistrog*, the distance is 11,298 versts. — The kalendar of the imperial academy at *Petersburg* sets it down at somewhat less. If we draw a line across *Mosco*, from *Riga* to the haven of *Peter and Paul*, as the

two extreme boundaries of the continent, we shall find it only 10,936 versts; from Riga to Mosco being 1018, from thence to Petropavlofskoi port, 9918 versts. On the contrary, according to that kalendar, the breadth is much larger. From Kertch to Mosco is reckoned at 1477, and from thence to Kola 2109 versts; though it is notorious that these two places are not by far the extreme boundaries*.

With regard to the appellatives, Red, White, Black, &c. some farther explanation seems necessary. It is well known that the state of Poland contained

* In order to render the extraordinary magnitude of the russian territory more apparent by a comparison, let us adduce to the above statement the data which one of the best informed historians has given of the extent and circumference of the roman monarchy at the height of its grandeur. 1. At that time the roman empire contained about 1,600,000 square miles; therefore exactly as much as only the european part of Russia. 2. The greatest length of it, from the Euphrates to the western ocean, amounted to 3000 miles, and the greatest breadth, from the wall of Antoninus to the pillars of Hercules, 2000 miles. If we travel the length of the russian empire, we shall find it to be, from Riga to Anadyrskoiostrog, 9684 miles, and thence to the haven of Peter and Paul, in Kamtschatka, 1750 more. 3. The possessions of the Romans extended somewhat short of 32 degrees of latitude; Russia comprises $35\frac{1}{2}$. *Gibbon*—Roman empire, 4to. vol. i. p. 33. — But, if we consider that the dominion of the Romans extended over the finest part of the temperate zone (from the 24th to the 56th degree of north latitude), and that the ground in the whole circuit of that territory consisted of the most fertile and productive countries of three quarters of the world, this seeming superiority immediately vanishes.

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some provinces that bore the name of Russia, without however being a part of the russian empire. Of this sort was the province of Red Russia in the lesser Poland, of which only the country of Chelm remained to the Poles; also lithuanian Russia in the grand duchy of Lithuania, formerly comprehending within its limits White and Black Russia, partly come back to the russian empire to which it originally belonged, being governed in the twelfth century by russian princes at Polotzk, descended from the princes of Kief. It is highly probable that even the whole of Red and Black Russia were formerly hereditary provinces of the russian empire, of which perhaps proofs are still in being among the archives of Russia. Without stopping here, however, to discuss what sort of title Russia may have to any such succession, it is but right to mention that we have not anywhere been able to find a satisfactory account of the origin of these names and their proper signification. Perhaps they may have been entirely without any; arising from accident, mere arbitrary denominations of certain tracts of country inhabited by Russians. At least this supposition is warranted by a custom observed in remoter times by the flavonian nations. Thus, concerning Servia, we know that the illyrico-servian empire was antiently called Red Servia; the german Sorbenland, White Servia; and the territory of Servitza, the Black Servia. In like manner, the Crovats, as long as they dwelt in Bohemia, gave

the country the name of Bielo Crobatia, that is, White Croatia. A part of Dalmatia being then styled by them Red Croatia. — Hence we might be led to conclude that the appellations White, Red, and Black Russia, must be of great antiquity. In the meantime, it must be confessed that Mr. Muller, so justly famous for his researches into russian history, is of a different opinion. As his thoughts on this subject contain much information, they deserve to be noticed here. He says: All the russian annals testify, that antiently there was but one undivided Russia, which, under that general denomination, extended toward the west, nearly upon the Vistula. The names of Little and White Russia were not heard of till after some principalities were taken in the fourteenth century by the lithuanian princes, and in the sequel incorporated with the kingdom of Poland. What bears the name of Red or Tschervonian Russia, it is true, received its denomination from the tshervenshian towns that form the principal part of it; but White Russia was singly and alone thus named by the Poles and Lithuanians, in order to distinguish it from the rest of the russian empire; which they styled Great Russia, not so much in opposition to Little Russia, as in respect to the spaciousness of its extent. — Russia was much weakened by the defalcation of several of its principalities as well as by the inroads of the Tartars: but after the grand duke Ivan Vassillievitch I. had united the majority of them under his
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sole sovereignty and thrown off the tartarian yoke, he first styled himself MONARCH OF ALL RUSSIA; which title was continued till the time of tzar Alexey Mikhailovitch; for the conquests made of some districts in Little and White Russia, by the grand duke Vassilli Ivanovitch and the tzar Ivan Vassillievitch, were only of particular towns and principalities, whereof several were in the sequel recovered by their former masters. But when tzar Alexey Mikhailovitch, in the year 1654, had taken under his dominion the little russian Kozaks, together with their towns and the whole population of Little Russia, he began to style himself SELF-RULER [AUTOCRATOR] OF GREAT AND LITTLE * RUSSIA. This monarch, in the same year, took the town of Smolensk by force of arms, and returned to Mosco; but prior to his expedition for the conquest of White Russia and Lithuania, being indubitably persuaded that he should reduce the regions formerly ravished from Russia to submission, he caused to be inserted in the tzarian titles, the words: OF ALL RED AND LITTLE AND WHITE RUSSIA; the first use of which appears in the *Universal* of the 21st of February 1655, as at that time Mohilef, Orsha, Vitepsk, Polotzk, Dunaburg, Borissf, Minsk, Vilna, Grodno, &c. together with all their towns and dependencies, were actually conquered. Sweden alone threw

* In testimony whereof there is still a decree of this tzar's, bearing date July 1st 1654.

obstacles in his way; while the Poles were making flattering promises to elect him to the throne of that kingdom: but the pestilence that followed, obliged this monarch to abandon his conquests. — Hence, however, it is clearly seen what we are to understand by the term White Russia.

The russian empire received a fresh augmentation at the treaty of peace concluded with the porte the 29th of December 1791; that is to say, the whole of the territory of Ochakof on the Bogue, as far as the Dniestr, which last-mentioned river is now settled to be the boundary forever*.

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* In addition to what has already been said of the extent of the empire, we will just give two calculations as made by professor Kraft of the academy of sciences. By some experiments in regard to the table for zones, where the flattening of the spheroid amounts to $\frac{1}{288}$, he found that the whole empire, the northern latitude whereof he admits to be $42^{\circ} 31'$ to $78^{\circ} 30'$ including the inland seas †, but exclusive of all the bays and gulfs, to have in the frigid zone 67,157 geographical square miles, (fifteen to a degree of the equator,) and in the temperate 263,349; together $\frac{1}{4}$ of the northern hemisphere, or 330,506 square geographical miles. By this calculation all the general maps of the russian empire then in being were proved to be wrong; and indeed the accuracy of all that have since appeared, at least in regard to several regions, may be very much questioned. If we add to this, that since the year 1783 Russia has greatly enlarged its territory, at the same time that the islands of the eastern

† Consequently he gives the empire a greater northern extent than we thought ourselves authorized to do.

ocean,

The empire has hitherto been considered as lying in but two quarters of the globe, namely Europe and Asia; future geographers may perhaps have to describe its dominions in a third, the continent of America; for the territory there, though probably at present but insignificant, may easily be extended and increased. Indeed from the forementioned Russian establishment on the continent of America, and the islands already made tributary there, the empire may even now with propriety be said to extend into that quarter of the globe.

Russia, by its magnitude and situation, has very various frontiers as well as neighbours. On two sides, namely, to the north and the east, if we omit the establishment on the continent of America, it is surrounded by seas. On the other sides it is bounded partly by terra firma, partly by seas, and here and there by rivers, namely, to the west by Denmark, by Sweden, and by the Baltic; but to the south, by Courland, Poland, Turkey, the Euxine and the Caspian, by Persia, China, and various tribes of almost savage, nomadic, or, in one word, uncivilized nations. Some of these borders are capable of enlargement, especially in the nume-

ocean, between Asia and America, though they are actually tributary to Russia and consequently belong to the empire, cannot be accurately laid down and brought into the account, which yet properly should be done; it will then appear that none of the statements hitherto made can be considered as complete.

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rous islands of the eastern ocean, which might easily be made tributary, as no other foreign power can lay any well-founded claim to them; again in the north on the continent of America; and among the independent hordes of Asia, who, besides, on account of their turbulence, sometimes deserve a little correction. — Other frontiers are fixed by treaty, viz.

1. With Denmark, concerning Lapland or Finnmark, in the year 1602.

2. With China and the Mongoles, in 1727. By the carelessness of a Russian minister, who was not sufficiently on his guard against the cunning Chinese, the limits were drawn to the disadvantage of Russia.

3. With Persia by the treaty of 1732. At present the river Terek is regarded in some respects as the line of limitation.

4. With Poland, by various treaties in 1667, 1672, 1717, 1721, 1773, 1776, 1781, 1793, and not finally adjusted till 1795.

5. With Sweden, by the treaties of 1721 and 1743. However, the borders are not yet accurately settled; for several islands in the river Kymmene, and numbers of bordering boors, belong neither to one nor the other of these powers, and therefore the latter live very comfortably in their own way, exempt from all tribute and burdens of every kind.

6. With the Turks, the ancient treaties were explained and amended by new ones in the year 1739, and still more in 1774, 1786, and 1791; and

and which we may probably expect to be done again, now that the two empires are come to a proper understanding.

7. With Courland the last settlement was made in 1783, till the final surrender of its independence in 1796.

This diversity of boundaries and neighbours, requires divers means of security and occasional defence. These must consist either in strong places, or a great force by sea and land, but both on different footings, according to the territory and to the nation against which they are to be employed. In some parts large ships of the line can only ensure safety; in others moderate sized vessels, or even little armed boats, may produce the same effect. Against some neighbours, strong forts on the frontiers are kept up; against others a wretched wooden wall, or stakes drove into the ground, with two or three iron cannon, and a garrison from eighty to two hundred men, completely answer the purpose. Against the attacks and robberies of uncivilized nations, lines are formed with petty forts or ramparts: some of these are provided with bastions of earth; others, properly speaking, have no fortress, but consist merely of casernes and stables, built in a quadrangular form, with a watch-tower at two corners*. Where security requires it, other forms of defence are used. Thus the village Raslomayef-

* Pallas's travels, vol. ii.

ikaia on the Tobol, between the borders of Orenburg and Siberia, is secured from all access by a strong hedge, in some places strengthened, for a considerable length, by chevaux de frize; but the village Nishno-Tschernafskoi has a fortified wooden *church. Some parts require no defence whatever; for example, the coasts of the frozen ocean; and the desert part of the mongolian borders, from the Oby to the Yenissei, is entirely unfortified and open.— In some places a river forms the boundary; as the Kymmene, before mentioned; in like manner, the Argune towards China; and not unfrequently a vast steppe, when the limits are not precisely drawn, with the nomadic and uncivilized neighbours.

From Tchutзкаia zemlia, northwards over Kamtschatka, the empire borders pretty nearly on America; being, by the latest observations, only separated from it by a strait of the sea, no more than one hundred and seventy-five english miles in breadth; namely, Behring's straits†. The Tchuktchi have not as yet been subjected; probably because it has not been thought worth while to fit out a military expedition for that purpose; nevertheless that people acknowledges the russian sovereignty. They have actually for a long time carried on traffic with the Americans that dwell over-against them, make use of the same

* Pallas's Travels, vol. ii. p. 406. 408, 409.

† Which Busching everywhere calls Cook's straits.

canoes with them, though they differ greatly from them both in language and dress. Beyond that cape, towards America, lie several isles, two of which are uninhabited. The main land of America there (if in fact it be not a very large island) may be seen from this promontory; and there is an american island at about the distance of two hundred and ten english miles from the possessions of Russia.

We come now to speak of the uncivilized nations that either belong to the empire, or are just without its borders. The latter are by no means dangerous neighbours, but are easily kept in awe; or, if they make an attack, are presently frightened back again. Against them the former are made use of as a defence. Indeed, it was formerly a hard matter to restrain them within bounds; but we have seen under the late reign what good regulations, without violent measures, will effect.

Those that belong to the empire may indeed cause some alarms lest a swarm of them should get over the borders, as did actually once happen some years ago; but means are used for the prevention of this: it is found, however, that such people are most easily managed and kept to their antient habitations by gentle treatment. Their own chiefs and khans receive titles, dignities, and presents; and able officers are kept among them as spies upon their conduct. Should they happily, by example and encouragement, habituate themselves to a better form of government, it would then be just the same thing

thing as if an entire nation had been added to the empire. Many of them have already addicted themselves to agriculture, and other useful employments, much more than formerly.—Even the borderers, by the wise methods pursued by the russian commanders, are become more serviceable to the empire, especially in matters of commerce.

The boundaries in general are so disposed, that an attack from regular foes is only possible on a few sides: and against these, sufficient means of defence are at all times practicable. A few regular enemies can never be of much consequence, as Russia always keeps on foot a respectable and well-disciplined army. Besides, the great possessions adhering together are so defended by the present constitutions of most of the neighbouring states, that Russia has never any need to fear an attack in the heart of the empire, though in former times a foreign enemy may have found it possible to penetrate so far.

It is scarcely necessary to shew that the empire, from the very nature of it, is capable of progressively growing to a greater, even to an astonishing magnitude, without attempting new conquests. It has already been attaining gradually to a high degree of power, particularly in modern times. Yet we are not to imagine (as some people not well-versed in history are apt to do) that it was formerly a country absolutely insignificant, or even quite unknown. In very remote periods, long before
7 Kazan,

Kazan, Astrakhan, Siberia, &c. were conquered, Russia was remarkable both for its power and its magnitude. How often did it not then strike terror into the haughty sovereigns of Constantinople, even while surrounded with the magnificence of imperial Greece? Moreover, the Poles, the Swedes, the Hungarians, even the far distant French, had kievian princesses on their thrones. — Internal divisions among brethren of the reigning family afterwards, indeed, weakened the empire, insomuch that it was deluged by a powerful foreign nation. But by its own inherent vigour, without the aid of external succours, it shook off the odious yoke, made extensive conquests, and evinced to the world what it was able to perform by its own power alone. Thus it rapidly grew into one of the greatest monarchies the universe had ever beheld. The colossus only wanted a skilful hand to shape it into form : and this it first found in Peter the great, and afterwards in Catharine the second. — True, it was the happiness of that emperor, that the imprudence, or rather the temerity, of Charles XII. contributed much to the rapidity of its advancement ; yet the consequences would have been less striking and brilliant, if the internal strength and greatness of the empire had not so signally concurred. Under the empress Anna, Russia with all her splendid victories, and combined with Austria, found it an arduous task to put an honourable end to the turkish war : an evident token, that a proper use was not made of the peculiar greatness

and the important resources of the country. Of all the powers confederated against the king of Prussia in the seven years war, the power of Elizabeth pressed hardest upon him: the consequences were not adequate to the expence, owing to the events and combinations that happened afterwards; however, the strength of Russia was not then entirely manifest. It was displayed during the war with the Turks in 1772, to so high a degree, as to raise the admiration of the world. Though the empress at that time maintained a body of troops in Poland, yet she stifled at once an intestine commotion; and without foreign aid, by her own forces, gained repeated victories over the Turks, conquered provinces, forts, and appeared with fleets that spread terror through regions to which the Russians were scarcely known by name, annihilated the formidable navy of her enemy, surrounded the whole numerous army of the Turks, performed wonders, and concluded a glorious peace. And what great achievements were not done in the last turkish war! — Russia, if her forces be properly employed, without the aid of foreign alliance, is fully able to resist the attacks of any invader. Extensive possessions, a brave people, excellent products, and considerable revenues, render it in all respects truly great; as will more plainly appear in the following sections.

SECTION II.

Climate.

FROM the enormous extent of the russian empire, and its situation in the equatorial and meridional degrees before-mentioned, it will naturally be inferred that the temperatures of the atmosphere must be various. It contains many regions that are blessed with the purest air, and the mildest sky ; but a greater number of others where the weather is extremely rude and cold, and many others again where the exhalations from the earth are not of the most salubrious nature. The parts lying towards the south enjoy a warm and agreeable temperature, in which almost all the plants and vegetables of countries situated much nearer to the equator flourish and abound. Thus, in the region of Tzaritzin, even those of China which most delight in warmth, thrive to perfection in the open air, and produce their seeds in full maturity. Yet these southern districts know nothing of such burning sands as are found in the sultry climes of Africa. Others again, in high northern latitudes, though not congealed in everlasting ice, are yet oppressed with so severe a frost as to exclude the arts of agriculture. On the whole, therefore, the climate is not excessively hot, except at certain seasons in Taurida, seldomer and less lasting in a few other places ; but in many regions it is extremely cold. However,

the one tract of country not only supplies the deficiencies of the other; but nature has kindly provided that every climate should be fitted to the wants of its inhabitants, and has adapted them to the temperature of their sky. High to the north she has dispensed no corn, but plenty of moss, for the animals; and for mankind an infinite variety of berries, of fish, and wild fruits. Farther to the south her liberality is displayed: beneath a mild and genial atmosphere she bestows on the inhabitants a superfluity of the finest products.

The remark, that places lying in the same degree of north latitude, or having the same polar elevation, do not exhibit the same temperature of climate, but that as we advance toward the east the cold is always more intense, is also corroborated by observation in the russian empire. The cause adduced by some respectable writers, that the eastern regions of Europe and Asia lie more remote from seas, than the western, by no means solves the difficulty; since many of them lie near enough to the sea, nearer than the western, nay some of them are even surrounded by seas, and yet are very cold: — on this head I need only mention Kamtschatka. — * M. Pallas seems to have come nearer the truth, by accounting for this phænomenon from the influence of mountains; yet even this hypothesis is not entirely free from obscurity and doubt.

* In his travels, vol. iii. p. 272.

In the middle and northern regions the winters are very cold, and the days uncommonly short; but the summers are so much the longer, and the heats are sometimes great. That the cold, however, attacks the brain, as Busching pretends, is a mistaken notion. In many of these parts the girls go always bare-headed, and the women wear only thin linen caps; and yet they neither feel headachs nor become lunatic by the practice. Only such as, having been accustomed to a warmer country, come to live in a colder, feel the cold, especially at first, very severe; yet, neither by it, nor (as he elsewhere maintains) by the brandy they have drunk in their youth, do people grow mad. The provinces on the shores of the Baltic are sufficient of themselves to refute this opinion. In severe frosts it is no unusual thing for men to be frozen, so as either to die on the spot, or, without speedy assistance, for the limbs that are frozen to fall off by degrees: but never any one became insane by it. The wives of the livonian boors even frequently give little potions of brandy, a favourite liquor with them, to their children at the breast, as well as to those of larger growth; yet fewer crazy and mad people are found here than in numberless other countries. — Whether the cold (likewise according to the assertion of Mr. Busching) be the occasion of certain epidemical diseases, must be left undecided. It may perhaps have been observed in some districts, but never authentically. People from different provinces, to whom the ques-

tion has been put, knew nothing of epidemical diseases that had arisen merely from cold. With delicate persons, especially of the higher classes, colds, defluxions, rheums, and coughs, are common enough, not merely during the cold of the winter, but also at other seasons of the year: the common people know but little of these complaints. These never feel any injury from currents of air, which we call draughts; though persons of the former description frequently take cold even when they have not stirred out of their warm apartments. In sharp biting frosts, if people are but properly clad, and forbear to sit down, especially upon the banks of snow, which may often cost them their lives; they find themselves more healthy than in the moist weather of autumn, though such as live in the country are obliged to expose themselves the whole day long in the open air, to the utmost force of the cold, in forests, on hills and mountains, in the streets, &c. Any slight colds they may take, or any obstructions in the pores, are soon remedied by the hot rooms in which they are accustomed to sleep, and still more by the frequent use of their universally beloved hot-bath. — One sure proof that in general the climate is not prejudicial to health is the great number of persons that in all these parts attain to a very advanced old age*.

The

* From fourscore to ninety is an age by no means thought extraordinary; but numbers continue advancing in years from that

The freezing of the rivers happens too in various ways, according to the degree of cold, the quality of the water, the current, and the nature of the * bed. Some carry floating ice, which at length consolidates; others, on a sudden frost, are covered at top with icy particles like gruel, which in a day or two congeals; others again, of a gentle current, are in one night covered with a thin scum of ice which gradually increases in substance; while the rivers in

that period. Among other instances that we could adduce from various quarters, we shall select one, of a man still living, of the name of Mikhaila Leonof Natshafka, who was formerly a burgher at Velitsk, and now keeps a krug, or public inn, in the village Beleika, near the old-russian borders, and in the government of Smolensk. So early as the year 1664, being then a well-grown boy, he was sent by his parents to search among the slain for the body of a relation who had fallen in the battle fought that year between the Russians and the Poles. This old man is still in the full enjoyment of his senses, converses intelligibly, and walks with his staff daily two or three versts on foot, for the sake of exercise. — This remark was made in 1792.

* In and about Mosco the rivers freeze about the middle or latter end of November, and break up in March or the beginning of April. The birch-trees come out in May, and shed their leaves in September. — About Kursk all sorts of fruit are ripe in August, and the corn is then all got in. Suyef's travels.

In Irkutsk the thermometer, on the 9th of December 1772, stood at 254 degrees; notwithstanding that the Angara there commonly freezes not till towards the end of December, and frequently not till the middle of January; and breaks up at the end of March, or before the middle of April. Georgi's travels, i. 36.

1792
1652
140

russian Dauria, or the province of Nertshinsk, differ from all these, and exhibit a quite different property: for there the ice first forms at the bottom; which is then lifted up by the water, where it remains till the whole river is entirely frozen up; and at times so much ice comes gradually in addition to it, that the water can scarcely find a free passage beneath it. Some derive the cause of this either from the quality of the beds of the rivers there, which universally consist of chalk-stone; or from the frigidity of the soil, which all the summer through never thaws to a greater depth than two arshines.

The frost, and still more the quantity of snow in connection with it, is of infinite advantage to the empire, as by that means the land-carriage is inconceivably facilitated. Many provinces could neither procure the necessaries of life, nor turn their own products into money, were it not for the frost and snow. No sooner is the sledge-way formed, than all the country roads are covered with carriages. In several districts, masts, barks, firewood, &c. can only be fetched in the winter, especially from marshy forests. What immense quantities of flax, hemp, tobacco, deals, tallow, &c. are brought by sledge-way from the distant provinces of Russia to the ports of the Baltic! One single winter so mild as to produce no snow, would in many regions put a total stop to commerce, as well foreign as domestic. In the winter from November 1789 to March 1790, the weather being for the most part mild, and but little

snow falling, several provinces suffered great injury. Much of their products could not be conveyed to the maritime towns. Great quantities of the provision brought for the supply of St. Petersburg was so spoilt that it was thrown away. In several towns, both inland and on the sea-coasts, there was a real scarcity of firing and other necessities: wood that had been sold at from one to two rubles the fathom, was not now to be had for less than double that price. Numbers that were under contracts for the delivery of brandy were very badly off. — Moreover, there are regions where the greater part of the year may properly be called winter, others where the winter lasts but a few weeks; some where storms are very frequent, others where they are extremely rare: of the latter sort are the parts about the frozen ocean*.

From several phænomena mentioned in the travels of the academicians, one would be tempted to sup-

* Busching remarks, that corn ripens in few places above the sixtieth degree of polar elevation. This however admits of some limitation: corn is indeed grown far higher than the sixtieth degree, though in those parts the husbandman runs great hazard of seeing his hopes entirely defeated by the frost of one single night, which sometimes happens in July or August. For instance, this is frequently the case at Meseu, which lies in sixty-five degrees north latitude, where barley is sown, which comes up finely, but seldom ripens. It grows to almost the usual height, and bears large ears; but does not come to maturity above once in twenty or thirty years: however, it is sown every year for the purpose of getting fodder for the cattle. Corn comes from Archangel.

pose,

pose, that even the north of Siberia must formerly have had a much milder climate, or have undergone a most stupendous revolution in nature. As a proof of this we may adduce the skeletons of elephants and other large animals found within the earth on the shores and rivers there. These bones and teeth have been described by that learned and ingenious traveller M. Pallas. A skeleton of this kind, which I have seen, was found, among others, several years since on the shore of the Irtysh, some fathoms deep in the earth, where the river has washed away part of its bank. In all these places they are known by the name of mammoth's-bones. Great numbers of them have been sent to Petersburg, where they may be seen in the museum of the academy of sciences; but they are not well put together. If these animals lived once where their bones are discovered, it is certain that these countries must formerly have had a very different climate. Did they go thither while alive? What inducement led them? Have they been wafted thither after death? What a flood it must have been that carried them! — Or, are they bones of sea-animals?

A general division of the whole empire may be made into three great regions, in regard to temperature, and the consequent growth of the productions of nature, viz.

1. The region lying above the 60th deg. and extending to the 78th degree of north lat.

2. The

2. The region lying between the 50th and the 60th degree of north lat. ; and,

3. The region which lies to the south of the 50th, and reaches to the 43d degree.

The first is the rudest and coldest. In it are contained the greater part of the governments of Irkutsk, Tobolsk, and Vologda; the entire governments of Archangel, Olonetz, and Vyborg, with part of those of Perme, Novgorod, and St. Petersburg *. All these regions lie in a very cold

* By the observations of the academician Euler there are even at St. Petersburg only two months in which it never snows. — In order to characterise the weather of the northern region we will give a short extract from the meteorological remarks published by M. Fries, of the territorial town of Usting Veliki in the government of Vologda. This town lies in $60^{\circ} 50'$ north latitude, and $62^{\circ} 10'$ east longitude from Ferro, 516 miles from the nearest shore of the frozen ocean, and 1002 miles from St. Petersburg. The mean heat and cold here is : above Reaumur's freezing-point in the month of April — till September; below the freezing-point in the month of October — till March. The mercury in Reaumur's thermometer, in the single month of June alone, falls never below 0, and only in January never rises above 0. The cold increased at times so late as in the middle of April to 30 degrees, and the quicksilver may, sometimes so early as November, and again in the first days of March, be hammered. In every winter are 120 days, in which the cold is more than 5 degrees; and, of them, 65 days in which it exceeds 10 degrees; yet the summer has more hot, than the winter has cold days. The thermometer stood, upon an average of several years, the whole day above 0 on 152 days, and below 0 on 150: consequently there were 63 days on which it stood alternately above

cold climate, having a winter extremely severe, especially Siberia.

The second region, in regard of its fertility, may be called the temperate; in one half whereof, that is, from the 55th to the 60th degree, the weather, though pretty severe and cold, yet allows the fruits of the field and the orchard to grow. In the other half, namely from the 50th to the 55th degree, the climate is much milder still, affording, beside the usual products, others which do not succeed in the former. The whole of this large, beautiful, and important region, comprehends the

above and below 0. The rivers are navigable about the 10th of May. At the end of that month the summer-corn is sown, and about the middle of June the fields are manured for winter-sowing; the harvest is commonly in August. The trees shed their leaves sometimes so early as the 10th of August; but usually about the 20th.

Ustiug Veliki lies $15\frac{1}{2}$ degrees more to the north than St. Petersburg, the quicksilver froze in open air the 4th of November 1786, during a cold of $30\frac{1}{2}$ degrees of Reaumur's thermometer; the 1st of December at 40 degrees, it fell the same day to 51, and the 7th of December even down to 60. The quicksilver then froze to a solid mass, so as to bear beating with a hammer, in a warm room, several times before any pieces flew off from it. See the observations of M. Fries, in Crell's annals, 1787, part x. p. 318, & seq. — At Krasnoyarsk the quicksilver froze at 235 and 254 deg. of de l'Isle's scale. Pallas, tom. iii. p. 419. — In Solykamsk, in 1761 it fell in the thermometer of de l'Isle quite down to 280 deg. Examen du voyage de M. de la Chappe d'Auteroche, p. 105.

governments

governments of St. Petersburg, Reval, Riga, Polotzk, Mohilef, Smolensk, Pskove, Novgorod, Tver, Yaroslaf, Kostroma, Viætka, Permia, Kolhyvane, a good portion of Irkutsk and Ufa, the governments of Mosco, Vladimir, Nishney-Novgorod, Kazan, Kaluga, Tula, Riazan, Voronetch, Tambof, Penfa, Simbirsk, Kursk, Orel, Novgorod-Sieverfk, Tischernigof, and the greater part of Kief, Kharkof, and Saratof.

The third is the hot climate, yielding products, e. g. wine and silk, which the two former do not. In this lie Taurida, Ekatarinossaf, the major part of Caucasia, and a part of Kief, Kharkof, Voronetch, Saratof, Kolhyvane, and Irkutsk.

In Astrakhan the heat is sometimes so intense that the mercury in Fahrenheit's thermometer is up at $103\frac{1}{2}$, and rain is then so rare, that without artificial irrigation all the plants are withered. — Among the finest and most fertile tracts of the Southern districts are the caucasian territory of the government of Caucasus and the mountainous part of the province of Taurida. The region about the Terek and the foot of the caucasian mountains bear the best wheat, the choicest orchard-fruits, wild and cultivated vine-stocks, mulberry-trees, wild olives, figs, chesnuts, almond and peach trees, saffron, &c. — Of the mountainous part of the province of Taurida, M. Pallas, in a late publication, gives so animated and delightful a picture that I cannot resist the temptation to insert a translation of it here, especially as it is not at all known in England.

“ One

“ One of the mildest and most fertile regions
“ of the empire is the beautiful semicircular and
“ amphitheatral vale formed by the tauridan moun-
“ tains along the shores of the Euxine. These
“ vallies, which are blessed with the climate of
“ Anatolia and the lesser Asia, where the winter
“ is scarcely sensible, where the primroses and
“ spring-saffron bloom in February and often in
“ January, and where the oak frequently retains
“ its foliage the whole winter through, are, in
“ regard to botany and rural œconomy, the noblest
“ tract in Taurida and perhaps in the whole extent
“ of the empire. Here on all sides thrive and
“ flourish in open air the ever-verdant laurel, the
“ olive-tree, the fig, the lotus, the pomegranate,
“ and the celtis, which perhaps are the remains of
“ grecian cultivation; with the manna-bearing
“ ash, the turpentine-tree, the tan-bark-tree, the
“ strawberry-tree from Asia minor, and many
“ others. This last particularly covers the steepest
“ cliffs of the shore, and beautifies them in winter
“ by its perpetual foliage and the red rind of its
“ thick stem. In these happy vales the forests con-
“ sist of fruit-trees of every kind, or rather they
“ form only a large orchard left entirely to itself.
“ On the shores of the sea the caper-bushes pro-
“ pagate themselves spontaneously; without the as-
“ sistance of art the wild or planted vine-stems
“ climb the loftiest trees, and, twining with the
“ flowery

“ flowery five-leaved ivy *, form festoons and
“ hedges. The contrast of the orchards and the
“ rich verdure with the beautiful wildness presented
“ by the adjacent mountains and rocks, which in
“ some places rise among the clouds, and in others
“ are fallen in ruins; the natural fountains and
“ cascades that agreeably present their rushing
“ waters; lastly, the near view of the sea, where
“ the sight is lost in the unbounded prospect: all
“ these beauties together form so picturesque and
“ delightful a whole, that even the enraptured
“ muse of the poet or the painter would be unable
“ to conceive a more captivating scene. The simple
“ habits and manners of the good-humoured high-
“ land Tartars who inhabit these paradisaical vales;
“ their turf-covered cottages, some hewn in the
“ rock on the mountain’s side, others placed amidst
“ the luxuriant foliage of the surrounding orchards;
“ the roving flocks of goats and sheep clinging to
“ the declivities of the solitary rock; the sound of
“ the pastoral flute, re-echoing its plaintive tones
“ among the hills — every thing here renews the
“ image of the golden age, its innocence and sim-
“ plicity; every thing contributes to cherish the
“ propensity to an artless, retired, and rural life,
“ and we for a second time gain a fondness for the
“ abode of mortals, which the horrors of war, the

* Called also in England the creeper, or the Virginian or American ivy.

“ fordid

“ fordid pursuit of wealth in great cities, and the
 “ luxury which fills the train of all the social vices,
 “ render so soon intolerable to the sincere votaries
 “ of wisdom*.

“ In these enchanting vallies, to the benefit of
 “ the empire, which no where, in its whole extent,
 “ possesses so fine a climate, might the useful pro-
 “ ducts of Asia minor, and of the southern parts of
 “ Europe, be made indigenious. The superior kinds
 “ of fruits may be produced here without trouble,
 “ and are for the most part so already. The best
 “ kinds of olive and fig-trees may be cultivated
 “ here; and even the sesamum plant never decays.
 “ Orange, lemon, and citron trees, and particularly
 “ the cedrat, the most excellent species of them,
 “ would bear the winter extremely well with a
 “ little care. The vine would be constantly im-
 “ proving, if but a judicious selection were made of
 “ the stocks for planting, if greater attention
 “ were paid to the various effects of the soil and

* To the generality of readers it may not be a matter of indifference to learn that the philosopher from whose pen this passage proceeds, resides at present, according to his wish, in the country the beauties whereof he here paints in such warm and poetical colours. As the health of this famous naturalist rendered his living in a warm climate necessary, on his request to the late empress he obtained not only immediate permission to choose for himself a place in her dominions, but also, on his pitching upon Taurida for that purpose, an estate in that province, and towards the forming of his establishment a present of ten thousand rubles.

“ situation

" Situation of the vineyards, and if more care were
 " had in working the must and keeping the wine.
 " For the use of the apothecaries and manufacturers
 " a number of excellent drugs and dyes might be
 " produced, which are at present brought from the
 " isles of the Archipelago, from Greece, from Asia
 " minor, and Persia; several of them are now seen
 " here growing wild. Likewise many hard and
 " useful kinds of wood, especially coloured, fit for
 " inlaid work, might here be propagated: per-
 " haps in some tracts even the sugar-cane would
 " thrive.

" On the whole, the botanical riches of the
 " mountainous part of the peninsula of Taurida are
 " so great and remarkable, that the number of those
 " plants alone, which are to be found no where else
 " in the Russian empire, amounts to several hun-
 " dreds, among which is a considerable variety of
 " species entirely new *."

If with Mr. Hermann, we divide the empire
 more accurately by its climates, it falls properly
 into four regions, each containing the governments
 as follows:

The VERY COLD region, from 60 to 78 degrees
 north latitude.] Vyborg, Olonetz, Archangel, the
 greater part of Irkutsk, Tobolsk, and Vologda, and
 a part of Perme, Novgorod, and St. Petersburg.

* Physical and topographical picture of Taurida, extracted
 from the journal of a journey made in 1794, by P. S. Pallas,
 p. 33—36.

3. 60 / 6 / 100
 16

The COLD region, from 55 to 60 degrees north latitude.] Reval, Riga, Polotsk, Pskove, Tver, Mosko, Yaroslaf, Vladimir, Kostroma, Viætka, the greater part of Perme and Kazan, and a part of Irkutsk, Kolhyvan, Ufa, Sinbirsk, Nishney-Novgorod, Kaluga, and Smolensk.

The MODERATE region, from 50 to 55 degrees north latitude.] Moghilef, Tchernigof, Orel, Kursk, Tula, Tambof, Penza, the greater part of Kief, Kharkof, Voronetsh, Riazan, Saratof, Kaluga, Sinbirsk, Ufa, Kolhyvan, and a part of Irkutsk, Kazan, Nishney-Novgorod, and Smolensk.

The HOT region, from 43 to 50 degrees north latitude.] Tavrida*, Ekatarinoslaf, the greater part of
of

* Tavrida has a very agreeable climate. For almost nine months in the year the inhabitants enjoy fine and warm weather, and Nature here requires scarcely three months for recruiting her vigour. The spring usually begins with March; and commonly the greatest heat is from the middle of May to the middle of August. This is generally so violent, that it would be very dangerous but for the wind that blows regularly every day from ten in the morning till six in the evening, which make it very supportable. Thunder, accompanied by heavy showers of rain, is here also not unfrequent, whereby the air is seasonably cooled. September and October are generally the finest months. The autumnal weather here first appears about the middle of November. The frost comes in December and January; but it is very moderate, and seldom lasts above two or three days. However, it is to be remarked, that the flat part of this country differs from the mountainous in this, that heat and cold are commonly greater in the former, and rain and snow more rare. In
general

of Caucasia, and a part of Kief, Kharkof, Voronetz, Saratof, Ufa, Kolhyvan, and Irkutsk.

These four regions so very different in regard of temperature, we must bear constantly in mind, in speaking of the climate of the russian empire. Hence we see that there are governments, which have the climates of two; others, as Kolhyvan, of three; and the government of Irkutsk even of all the four regions. Whatever Nature produces under these meridians, Russia either has or may possess; it may boast of advantages to which no other single empire or country of Europe can pretend.

These regions being so diverse, various also must be their weather, the alternation of seasons, and other phænomena of the atmosphere. While, in one region, the warm and genial breezes of the spring are coming on, in others the severity of winter still prevails; and there are mountains, in the long chains of Ural, and yet more in those of Altay and Sayane, which are never free from ice and snow. So likewise there are several promontories, in the frozen ocean, whence as far as the eye can reach, the water is covered with ice

general through all the districts of Tavrída, a few places upon the Sibash excepted, the air is reputed to be very healthy. — About Kursk, in the Ukraine, all kinds of fruit, arboufes, melons, and apples, are ripe in August, and the corn is by that time already cut, and got in. The rivers freeze towards the close of November and in December, and in March are again free from ice. Suyef's travels.

even in the height of summer, and rivers which are scarcely free from it for two or three months in the year. It may in general be affirmed, that in many districts of the FIRST region there is hardly any summer; for the three or four months in which it does not snow in some districts scarcely deserve that name. However, it is an observation, confirmed by repeated experience, that the farther a district lies towards the east, so much is the weather proportionably colder. The fruits, for example, that come to maturity beneath and above the 60th degree north latitude in and round St. Petersburg, and in the government of Vyborg, are not produced under the same latitude in Siberia. Probably the proximity of the mountains, and the cold north winds blowing from the frozen ocean, are partly the cause of this difference, to the disadvantage of the latter. In many of the northernmost morasses the ice does not dissolve to above the thickness of a quarter of an arshine. — Even the weather of St. Petersburg, by reason of its situation so far to the north, is rude enough, and, from its vicinity to the sea, unsettled and unfriendly. The cold during the winter months is here very intense. The winter of 1798 and 1799 was the coldest ever known in the memory of man or that is recorded in the registers. At Sestrabek, on the coast of the gulf of Finland, within a few miles of St. Petersburg, the mercury in Reaumur's thermometer was as low as 34 degrees; at St. Petersburg 32½. A few miles beyond Mosco the same thermometer

thermometer was from 22 to 33 degrees during thirty-five successive days. In the south of Russia the cold was also greater than it was ever known in those regions. At Nikolayef on the Bogue the thermometer was frequently so low as 26. The latitude of Nikolayef is about 45 degrees.

A high northern situation, in a low plain covered with swamps and woods, intersected by a number of large rivers, renders the climate cold, rude, and, in some circumstances, singular. The imperial academy of sciences, from its first establishment in 1725, has kept regular observations of the weather; and the freezing of the Neva has been annually noticed from 1718, together with the day on which the ice broke up. By these observations it appears that it happens upon an average of one year with another on the 14th of November.

The spring has in general much frost, snow, and rain. The month of March, old style, which must be all along understood, as it is the style of the country, is always a winter month, with bright days. According to the average of the observations made by the academy during ten years, March has ten bright, eight cloudy days, two days of rain, and eleven of snow.

April, during the same period of ten years, has upon an average annually eleven bright, eight cloudy, four snowy, and seven rainy days. In this month the swallows appear, the buds of the trees

open, and the vernal flowers are seen. — Most commonly the ice of the Neva breaks up in April.

May, upon an average of ten years, has thirteen bright, five cloudy, and thirteen rainy days : neither is it entirely without snow. It is not unusual for the last half of this month to be raw and boisterous, whereby vegetation is much checked, and the summer shortened. But, as it often has days of very severe cold, so, on the other hand, as in the years 1729, 1749, 1759, 1766, and 1767, the hottest days were in the month of May.

The summer is mostly fair and fine. Its longest day is eighteen hours and an half ; and in the evening twilights, which are uncommonly luminous, it is easy to read or write. In general the very sultry days are but few ; and these are amply compensated by the cool evenings, nights, and mornings. Some summers, however, are very wet and cold : and, in the country, now and then, they experience nightly frosts.

According to the ten years average taken by Mr. Kraft, the month of June, the nine first days whereof belong to the spring, has nine bright, eight cloudy, and thirteen rainy days.

July, thirteen bright, four cloudy, and fourteen rainy days. The corn harvest usually begins about the 25th of July.

August has eight bright, seven cloudy, and sixteen rainy days.

The

The autumn has rarely many bright days, but is mostly cloudy, wet, and boisterous. Such a fine autumn as that of the year 1789, and in general such a fine year throughout, very seldom happens.

On an average of ten years, the month of September, the nine first days whereof belong to the summer, has only five bright, eight cloudy, and sixteen rainy days; on one day there was even a fall of snow.

October has four bright, nine cloudy, thirteen rainy and snowy days.

November is commonly wintry weather throughout. According to the calculation of professor Kraft, on an average of ten years, it has annually five bright, ten cloudy, four rainy, and eleven snowy days. In November the Neva is usually covered with ice.

The winter is always severe; and, as the atmosphere is for the most part dry, even in snowy weather, it is so far advantageous to health, that the fewest sicknesses and deaths of all the year are observed to happen in this season. Indeed, so far from being unwholesome, this dry cold, if not so extreme as to be oppressive, gives life and spirits both to man and beast. Its shortest day is only five hours and a half; and, if about this time the days be cloudy, though a great light proceeds from the snow, yet it is but for a short time that candles can be dispensed with. Not only the Neva, but

also the vast Ladoga lake, the Peipus, the Cronstadt gulf, and generally even the gulf of Finland, as far down as the islands, are every year covered with ice three quarters of an english yard in thickness.

According to the foregoing remarks of the academician Kraft, on an average of ten years, December, the nine first days whereof are to be reckoned to the autumn, has only three bright, nine cloudy, sixteen snowy, and three rainy days.

January has eight bright, eleven cloudy, eleven snowy, and two rainy days.

February has eight bright, six cloudy, twelve snowy, and two rainy days.

By this average then the inhabitants of St. Petersburg have annually ninety-seven bright days.

In like manner, the result of the accurate observations for ten years on the quantity of rain and snow falling at St. Petersburg, was found to be, that the mean annual duration of rainy and snowy weather is forty-two times twenty-four hours, or somewhat less than the ninth part of the year. From a ten years' observation it was seen that it rains for one hundred and three days, and snows for seventy-two; and that, if we divide the year into twelve equal parts, one fourth part is fair weather, one third rainy weather, and one fifth part snowy weather. The whole quantity of rain and snow water taken together which fell within one half-year, is observed to be in the following proportions:

January

January	-	0,979	July	-	2,760
February	-	0,979	August	-	2,671
March	-	0,801	September	-	3,473
April	-	1,246	October	-	2,493
May	-	1,335	November	-	1,513
June	-	3,116	December	-	0,079

Total, 22,345 english inches.

The height of the annually falling rain and melted snows, dew, hoar-frost, (not reckoning the the moisture of cloudy days and hail,) rose during somewhat more than twenty years in which it was observed by the academy, annually from $12\frac{1}{2}$ to $26\frac{3}{4}$ Paris inches; that is, so high would the surface of the earth have been covered with the falling water, if it had remained where it fell, undiminished by evaporation and the imbibing of the earth. According to another observation of Mr. Kraft, the mean number for one year amounts to $20\frac{1}{2}$ inches. The snow-water scarcely forms the third part of this quantity. In London the height of the yearly falling water, upon an average, is $18\frac{1}{2}$ inches, in Paris 17 inches, in Berlin $19\frac{1}{4}$ inches, at Abo in Finland $23\frac{3}{4}$ inches. The same learned and industrious academician has also calculated the height of the falling atmospheric water in every month, upon an average of several years.

	Inches.	Lines.		Inches.	Lines.
January	- 0	11	July	- 2	7
February	- 0	11	August	- 2	6
March	- 0	9	September	3	3
April	- 1	2	October	- 2	4
May	- 1	3	November	1	5
June	- 1	11	December	0	11
			September		

September is therefore the wettest, as March is the driest month.

The cold and its effects are here very remarkable. There are annually from one hundred and fifty to one hundred and ninety days of frost, the severity and continuance of which freeze the ground every winter from two to two and a half, and sometimes even three feet deep. The ice of the Neva is from twenty-four to thirty-six, but generally twenty-eight inches thick. It is curious to observe, that, though this thickness of the ice is formed by the sheets of ice lying horizontally on one another, yet the huge blocks of it that are cut out for filling the ice-cellars, on being left exposed to the sun, fall to pieces in perpendicular spiculæ, each of the thickness of one's little finger. So likewise in the spring, by pressing on a walking-stick, while the ice is still of its primitive thickness, the stick will go through, because it pushes down one or more of these spiculæ from their connection with the rest.

The covering of the Neva with ice, and the breaking up of it, are remarkable phænomena. When the ice is setting in, as it is called, small detached flakes of ice are seen floating down the current, which soon grow into large fields, and acquire so great a momentum, that the bridges must be hastily taken asunder, to prevent their being carried away by the ice, a disaster which has happened more than once. These large plains
of

of ice continue for a day or two passing with the current, while the boats are seen rowing between them; till all at once the floating ice stops, either by the gulf being already closed below, or the flakes of ice freezing together: when immediately foot-passengers, who have been waiting on the shores for this happy moment, go over in all safety. Nothing is more common than to see boats crossing the river, and, in two hours afterwards, to behold hundreds of people going over on foot.

No less rapid is the departure of the ice. In the spring, the first indication of this approaching event, is the standing of the snow-water on the ice; then the ice becomes more porous, or divides into spiculæ, lets the water through, and becomes of a blackish colour. At length it parts, while the roads that have been well trod during the winter still remain; so that often foot-passengers are seen on these roads, and between them and the floating sheets of ice, boats in great numbers passing and repassing. By the force of the current, and shocks received from the floating ice, at length the roads give way; the ice continues to fall down with the stream for a day or two to the gulf, and the whole river is clear. A week or a fortnight after this, the ice of the Ladoga comes down; which, according as the wind may happen to be, continues a couple or more days, sometimes as many weeks, and renders the atmosphere uncommonly chill.

The

The ice and the cold are of service to the inhabitants in various ways. Distances are much shortened by their means, inasmuch as people, horses, and carriages of all sorts, and of ever so great burden, can cross the Neva, and the other rivers, lakes, and canals, in all places and directions: and the Cronstadt gulf supplies, in some measure, the want of navigation during the winter, by the transport of commodities of every denomination over the ice. As ice-cellars here are a necessary of life, for keeping provisions of all kinds during the summer, so every house in every quarter of the town is provided with one of them, to be filled with large blocks cut out of the river. This operation generally takes place about the beginning of February. The ice also promotes the pleasure of the inhabitants by giving them an opportunity for the diversion of sledge and horse-racing, and for that of the ice-hills so much admired by the populace, and of which I shall speak more at large hereafter. The weight of these ice-hills, together with that of a multitude sometimes of five thousand or six thousand persons standing about them on holidays, give the spectator a surprising idea of the strength and solidity of the ice.

What may be executed in ice was shewn by the Ice Palace which the empress Anna caused to be built on the bank of the Neva in 1740. It was constructed of huge quadrats of ice hewn in the manner of free-stone. The edifice was fifty-

two feet in length, sixteen in breadth, and twenty in height. The walls were three feet thick. In the several apartments were tables, chairs, beds, and all kinds of household furniture of ice. In front of the palace, besides pyramids and statues, stood six cannons carrying balls of six pounds weight, and two mortars, of ice. From one of the former, as a trial, an iron ball with only a quarter of a pound of powder, was fired off. The ball went through a two-inch board at sixty paces from the mouth of the cannon; and the piece of ice artillery, with its carriage, remained uninjured by the explosion. The illumination of the ice palace at night had an astonishingly grand effect.

That the reader may be able to judge whether the climate here has become more severe or more mild, in a period of sixty years, or whether it has continued the same, I will subjoin the meteorological table from the works of the academy of sciences; but, for brevity's sake, take only from five to five years.

Years.

Years.	Reaumur's thermometer.		Rain and snow days.	Ice broke up, earliest and latest.	Standing of the ice, earliest and latest.
	Greatest heat.	Greatest cold.			
From 1726 to 1730 inclu.	Not observed.		47	{ Mar. 27. Apr. 14.	
1731 to 1735.	Not observed.		35	{ Mar. 26. Apr. 24.	
1736 to 1740.		21 deg.	38	{ Mar. 25. Apr. 26.	Oct. 24. Nov. 14.
1741 to 1745.	21 deg.	22			
1746 to 1750.	27	22		{ Mar. 25. Apr. 25.	Oct. 23. Nov. 20.
1751 to 1755.	24	22		{ Mar. 26. Apr. 27.	Nov. 7. Nov. 20.
1756 to 1760.	22 $\frac{1}{2}$	33		{ Mar. 27. Apr. 21.	Nov. 4. Nov. 19.
1761 to 1765.	22	27		{ Mar. 28. Apr. 23.	Nov. 8. Nov. 23.
1766 to 1770.	21	33	73	{ Apr. 1. Apr. 15.	Oct. 20. Dec. 1.
1771 to 1775.	21 $\frac{1}{2}$	28 $\frac{1}{2}$	166	{ Apr. 5. Apr. 19.	Oct. 31. Nov. 12.
1776 to 1780.	22	32	182	{ Mar. 31. Apr. 19.	Nov. 1. Nov. 21.
1781 to 1785.	22	30	85	{ Apr. 7. Apr. 22.	Nov. 6. Nov. 27.
1786.	23	23	185	Apr. 10.	Oct. 26.
1787.	25 $\frac{1}{10}$	25 $\frac{1}{10}$	215	Apr. 13.	Nov. 14.
1788.	26 $\frac{1}{4}$	24 $\frac{1}{2}$	183	Apr. 9.	Nov. 6.
1789.	24	25 $\frac{1}{2}$	138	Apr. 19.	Nov. 14.

The

The height of the barometer during this time was never higher than $30\frac{9}{10}$, and never lower than $26\frac{9}{10}$ inches.

The Neva never broke up before the 25th of March, and never later than the 27th of April. The earliest standing of the ice was the 20th of October, and the latest the 1st of December. Its standing and breaking up determines our summer and winter.

On the breaking up of the ice, when the river is so far open as to be navigable for boats, the event is announced to the town by the firing of three cannons from the fortress. Upon this the surveyor of the city-wharfs goes in a barge with the city-flag flying, accompanied by a number of other barges, to the fortress, and salutes it with seven guns, on which the fortress returns the salute with five. From the fortress he then proceeds to the imperial winter-palace, where, on being come near the shore, he again makes another discharge of cannon, which is followed by three cheers from the crew, repeated by the companies of the numerous barges. This done, they all return in procession to the place from whence they came. Previous to this ceremony, no boat may dare to shew itself on the Neva; but from that moment any one may pass upon it that will: and so long as the Neva continues open, the rising and setting of the sun are noticed by a gun from
4 the

the fortrefs. But this is discontinued during all the time that the Neva is covered with ice.

The severe cold here has not that violent benumbing effect either on man or beast as people in fouthern climates might imagine. This seems to be principally founded on the dry quality of the air during the frost, and perhaps in some measure may be owing to habit, by which both men and the inferior animals are hardened to the climate. However this be, from the dryness of the atmosphere, foreigners, according to the universal testimony of them all, suffer much less from the cold, than they do from less degrees of it in other countries. The drivers and their horses, from being seasoned to the cold, feel little or no inconveniency in pursuing their employment through the streets of the town and along the roads, though the beards of the former and the muzzles of the latter are covered with hoar-frost and little icicles from the congelation of their breath ; and in the severest colds they travel all day without receiving any detriment. Nay, even in from twenty to twenty-four degrees of Reaumur, women will stand rincing the linen through holes in the ice, four, five, or six hours together, often barefoot, with their hands dipping in the water all the while, and their draggled petticoats stiff with ice.

The heavy gales of wind which prevail in these parts, and more especially in the gulf of Finland, have

have frequently occasioned much distress, by the swelling of the Neva, and the consequent calamitous inundation of the city. However, it is consoling to find, that from the repeated observations which have been made, these inundations are no longer so dreadful as formerly, because the overflowing of the river to about the height of six feet above its ordinary level, which formerly used to lay the whole town under water, does not any more produce that effect, except on the lowest quarters of it; a circumstance arising hence, among other causes, that, by the perpetual increase of buildings, the ground is become gradually higher. — The first inundation we know of happened in the year 1691, an account of which is given by Weber, the minister from the elector of Hanover, from the report of some fishermen who lived at Niensthantz, at that time a Swedish redoubt on the Neva. About this period, it is pretended, the water used to rise every five years. As soon as the inhabitants of the parts adjacent perceived the storm coming on with unusual vehemence, which, from sad experience, they knew to be the forerunner of one of these inundations, they immediately took their huts to pieces, tied the barks of them together in the form of a float, fastened them to the topmost branches of the highest trees, and ran as fast as they could to the Duderhof-hills, fifteen versts from their place of abode, where they remained till the water had subsided. — From various observations made on this subject, the following

conclusions have been drawn: the highest swells, namely, above six feet high, usually happened in the four last months of the year. Snow or rain have never had any remarkable effect upon them. The accumulation of the ice at the mouth of the Neva often causes some floodings; but the principal causes of the overflowings of this river are the violent storms and winds from the south-west, or west, or north-west, which commonly are prevalent towards the autumnal equinox, and the elevation of the water is always in proportion with the violence and duration of these winds. In a word, the circumstances that mostly contribute to make the Neva overflow, are, if at the time of the autumnal equinox, three or four days before or after the full moon or new moon, when she is near her perigæum, a vehement north-west wind drives the water of the north sea during the flood and ebb into the Baltic, and at the same time with it or suddenly after it a south-west wind blows over the Baltic or the gulf of Finland. All these circumstances united, for example, at the great inundation in 1777. It happened two days before the autumnal equinox, four before the full moon, two after its transit through the perigæum, and with a storm from the south-west, previous to which there had been strong west winds in the north sea, and vehement north winds at the mouth of the Baltic. — The most memorable of these floods, of which we have any account, were the following: in 1715, which, though, the day is not noticed, yet
went

went over almost all the bulwarks. In 1721, the 5th of November exactly at the full of the moon. In 1723, some day of October, also at full moon, when the flood rose three inches higher than in 1721. In 1725, the 16th of November. In 1726, the 12th of November, the day after full moon, from eight o'clock in the morning till mid-day, when the water rose to three and a half archines above its ordinary level, and one fourth and a half or eight decimal inches higher than in 1721. In 1727, the 21st of September. In 1728, the 3d of August and 3d of November. In 1729, the 3d and the 12th of October, the day after the new moon, about ten o'clock in the morning, with a violent storm from the sea. In 1732, the 15th of September. In 1733, the 6th of September, the 8th and 31st of October, and the 12th of December. In 1735, the 26th of February; in the same year again in the night between the 9th and 10th of October, with a storm from the north-west which held the same course till noon, so that the overflowing water, by about eight o'clock, had deluged every quarter of Petersburg to the height of an ell, and did not abate till afternoon. In 1740, the 12th of September, the day of the equinox, when the flood rose two arshines and three vershoks above the bed of the river. In 1752, the 22d of October, with a flying storm, from the south-west, verging to the west, which about ten at night so raised the water, that it came nine feet and an half above its usual station,

station, and inundated all the islands and the several quarters of the town (the Stickhof and the part about the Nefskoi monastery excepted) with tremendous violence, and causing great damage to the inhabitants; but presently after midnight it subsided with equal rapidity. At this flood it was very remarkable, that, on the 25th of October, with a strong gale from the S. S. W. the water, which had been pretty high in the nearest streets, swelled on the 26th with a south-west wind so as to overflow the whole city, yet forasmuch as the violence of the storm turned in time to the north, overflowed by one arshine lower than the former day; and, lastly, that, on the 28th in the afternoon, after the stream had returned on the 27th to its ordinary channel, a new flood, almost without wind, succeeded, which did again much damage on the Vassilly ostrof, and probably was occasioned by storms at sea which had compressed the waters of the gulf of Finland. The last, and one of the most destructive inundations, was that in the autumn of the year 1777, and which in some respects exceeded all the foregoing, as it continued the whole night from the 9th to the 10th of September (therefore three days after the moon was at the full) with an uncommonly low state of the barometer; a violent south-west and afterwards westerly wind raging all the while, which forced the stream at five in the morning over its banks, and laid all Petersburg under water in many parts above two ells, but spent the most of its fury on the
Vassilly

Vasily ostrof and what is called the Petersburg-side, washing away fences, bridges, and such houses as were most exposed to the sea, forcing up whole acres of forest trees by the roots, transporting yachts, galliots, and heavy loaded barks to a great distance on the land, and dashing others to pieces, and certainly would have raged with greater fury, and have committed far more havoc, had not the tempest, towards eight o'clock, when the flood was risen to more than ten feet above the common level of the river, and upwards of a foot and a half higher than in 1752, veered to the north-westward and caused the decline of the water, which about noon was well-nigh retired from the streets. Were the Baltic subject to a considerable flux and reflux, the inundations of Petersburg would be incomparably more terrible, and in all probability not much inferior to the remarkable spring-tide at Bristol, which often, in particular circumstances, increases, to fifty, or even to sixty feet. However it is possible that storms prevailing in the north sea during the time of the spring-tides, which impel together an extraordinary quantity of water into the Baltic, may remotely contribute to the inundations that happen at St. Petersburg, when the winds that act to that end combine with these circumstances. — Less considerable floodings of the Neva are not unfrequent in autumn, rising to the height of from five to seven feet, and have been remarked to happen ten times only since 1752; as, in 1756, the 29th of September,

tember, with a storm from the west, to seven feet three inches english measure; in 1757, the 16th of October, with a storm from the south-west, to the height of six feet two inches; in 1762, the 28th of October, with a south-west wind, five feet ten inches; in 1763, the 8th of October, with a south-west wind, five feet four inches; in 1764, from the 6th to the 24th of November, seven feet four inches; in 1765, the 16th of November, in a perfect calm, five feet six inches; in 1772, the 31st of December, with a south-west gale, five feet two inches.

The aurora borealis is very frequent, and not uncommonly makes its appearance with extremely vivid white corrugations of light. The year in general produces from twenty to thirty displays of those inexplicable phænomena: sometimes they reckon forty; but in 1762 there were only two, and in 1731 four exhibitions of the northern lights.

Storms of thunder and lightning are neither numerous, violent, nor lasting. In 1732 there were only two; in 1750 but three; though annually they may be computed at from six to eighteen. At times, however, they do considerable damage. Therefore the tower of Peter's church, which was deprived of its spire by lightning, the palaces of Gatchina and Peterhof are provided with conductors, the former on the principles of M. Alb. Euler, of our academy; the two latter were placed under the directions of prof. Kohlreif.

No

No winds are particularly predominant here, though in one year this, and in another that, is most frequent. According to the observations kept since 1725, there are annually from ten to sixteen tempests. Of these the most injurious to navigation are those that come from the east, because they occasion the water of the Cronstadt gulf to be so low that no ships of burden can come up; the western tempests, as before remarked, are more prejudicial to the city, by causing a swell of the Neva, and at times inundations.

Hoar-frosts are common, covering and ornamenting the leafless branches of the trees, in the winter months, with their extremely beautiful, sparkling, white, icy crystallizations. It but seldom hails; not above six times in the year — and the hail-stones are always small.

The sudden transitions of the air to different temperatures have often been mentioned as remarkable by travellers, with great justice. Thus, at Petersburg, on the 12th of February 1794, they had 13 degrees of frost; on the 13th, 2 degrees of thaw; the 14th, frost again; and on the 15th, 19 degrees of frost, by Reaumur's thermometer.

In the SECOND region the summer is indeed likewise in many parts short; yet in most of them so warm, and the days so long, that the fruits of the earth usually come to perfect maturity in a much shorter space of time than elsewhere. The winter too, in this region, particularly in the governments

of Irkutsk, Tobolsk, Perme, Viætka, &c. is for the most part very severe.

In the THIRD region, there are very extensive districts; for instance, in the governments of Irkutsk, Kolhyvane, and Ufa, where the winter is also long and cold. This, however, arises more from the very lofty mountains with which these districts abound. But the governments in the european division of Russia that lie under this meridian, mostly enjoy a short and tolerably temperate winter, and a fine warm summer *.

In the FOURTH region the winter is short, and (though in some parts of the governments of Irkutsk and Kolhyvane, cold enough) the summer warm, often hot, and in many parts very dry †. The

* In and about Mosko, e. gr. the rivers freeze over in the middle or towards the latter end of November, old style; and break up in March or the beginning of April. The buds of the birch-trees expand in May, and shed their leaves in September. — The river Ural usually flows, near Gurief, free from ice about the beginning of March.

† M. Falk writes as follows concerning the district circum-jacent to the Terek: “The spring is short and very pleasant; “the summer hot, with frequent rains and storms; the autumn “short and dry; the winter short, clear, and rude.” And, of the parts about the Irtysh: “The climate of the lower region of the “Irtysh, on account of its eastern, and partly northern situation, “is very severe. The winter is continually keen. The sum- “mer, for a great part of it, has such a foggy atmosphere, that “we get but a very small horizon, and I can frequently look “steadfastly at the dim orb of the sun with my naked eye, as we “do

The immense territory of this empire likewise naturally forms itself into two grand divisions, by the vast Ural chain of mountains intersecting it from north to south; these divisions are very unequal, both as to dimensions and quality. That on the westward, is proper or european Russia; and that lying to the east, asiatic Russia, or Siberia.

“ do at the moon. The spring and the autumn are mostly
 “ bright, but are subject to very rapid transitions from pretty
 “ warm to biting cold. Falls of snow are not rare in May and
 “ September; and, July only excepted, no month in the year
 “ is secure from night frosts. But, in spring, here, as in the
 “ quite southern and middle Siberia, every thing comes forward
 “ with amazing rapidity.” P. 258. — In Omsk, where the Om
 falls into the Irtysh, the cold, in 1770, was from 151 to 213
 degrees of de l’Isle. In January 1771, the least cold 160, the
 greatest 200 degrees. In February from 160 to 205. March
 the 12th it was at 190, and the 27th at 140 degrees. The Irtysh
 here breaks up in March, usually between the 10th and the 20th.
 In Kishlar, and about the whole of the Terek (the most southern
 districts of the russian empire), the S. S. E. and S. winds, from
 the mountains, are very drying and cold. From 1768 to 1773
 the greatest heat here according to de l’Isle’s thermometer, was
 97 degrees, and the greatest cold 191½ degrees. On the 9th of
 November 1770, a small shock of an earthquake was felt there.
 Guldenstädt, part i. p. 177. — In Irkutsk, the 9th of December
 1772, the thermometer stood at 254 degrees, and the quicksilver
 consolidated in it. Georgi, travels, part i. p. 36.

The Angara there commonly does not freeze till towards the
 end of December; frequently not till the middle of January, and
 is already open again by about the close of March, or at farthest
 the first days in April.

The

The air, in all the northern governments, or that lie somewhat high, is very salubrious. The same may be also affirmed in general of the second and third regions, excepting only the districts from the Oby down to the Irtysh, and on the Ui and Ural as far as the Caspian sea, where every year those asthmas prevail which are known under the name of *yafva*. The fourth region likewise contains a great deal of low lands, partly swampy and partly dry, and saline steppes, which are certainly none of the healthiest.

Rains fall in common very copiously in the northern and middle governments; though this admits of its exceptions. M. Hermann says *, that from the autumn of 1786 till the summer of 1788, in which he writes, the weather in all Siberia, and in many of the Russian governments, had been so unusually dry, that such a failure of the crops, and such a want of water at the mines, was never heard of before by the oldest man alive.

Some of the parts adjacent to seas, lakes, and large rivers, are often incommodated by thick fogs; but the greater part of the empire enjoys a bright, and but too frequently an air more dry than might be wished.

Most of the governments are subject to great quantities of snow; but not all. In some districts, for instance, about Nertshinsk, they are usually but

* Statistische Schilderung von Russland, &c. p. 55.

scanty

scanty in snow, though the cold of the winter with them is very severe.

The winds are in some parts very violent, especially in Siberia, where reigns a certain tremendous kind of winter hurricane, which they call burun, and which not unfrequently buries both men and cattle in whirlpools of snow and sand.

Storms, in most of the districts, are not so frequent, and generally speaking not by far so violent, as in other places; neither was any mischief ever known to have been done by lightning. In the parts to the north thunder and lightning are even great rarities.

On the other hand, the northern lights are ordinary appearances; and in many of the northern districts, a few months excepted, are, in a manner, to be seen daily.

Earthquakes in most of these parts happen but seldom. Yet there have been some, felt over Kamtshatka to the mountains of Altai*.

In the northern districts the days in winter are extremely short; but in summer therefore so much

* In the year 1741 three earthquakes were felt on Bering's island; and in 1780 a violent earthquake committed great depredations on the Kurilli islands, particularly on the 15th, 16th, and 17th. On the 21st of January 1725, and again in 1768 and 1769, earthquakes were felt in Daouria, Irkutsk, &c. and in 1734 at Tomsk. In the vicinity of Baikal lake almost every year smart shocks are felt. Georgi.

the longer. On the shortest day, the 10th of December, old style,

the sun rises,			and sets,	
In Astrakhan,	about 48 min. after	7.	12 min. after	4.
Kief, - - -	7	8.	53	3.
Mosco, - - -	37	8.	23	3.
Riga, . - -	47	8.	13	3.
Tobolsk, - -	56	8.	4	3.
St. Petersburg,	15	9.	45	2.
Archangel, -	24	10.	36	1.

SECTION III.

Nature and quality of the ground.

THE quality of the soil, in this enormous empire, as may well be supposed, is extremely various. There are entire, and they very extensive governments, that are full of mountains: but others, in still greater number, that consist of vast steppes and plains, some of which are inexplorable to the eye.

I shall commence this head with a few general remarks made by that diligent and accurate surveyor, capt. Pleschéyef: "Russia (says he) is divided by nature into two great parts by a range of mountains called Ural, which form one continued uninterrupted barrier across the whole breadth of it, dividing Siberia from the rest of Russia.

"That part of Russia which lies on this side the Ural mountains presents a vast extended plain verging

ing towards the west by an easy gradation. This plain, from its prodigious extent, has a great variety of climates, soils, and products. The northern part of it is very woody, marshy, but little capable of cultivation, and has a sensible declension towards the white sea and the frozen ocean. The other part of this extensive plain includes the whole district along the river Volga, as far as the deserts reaching by the Caspian and the sea of Azof, constituting the finest part of Russia, which in general is rich and fertile, having more arable and meadow land, than forests, swamps, or barren deserts.

“ The most remarkable, for superior quality and flavour of every kind of fruit and other productions of the earth, is that part which extends towards Voronetch, Tambof, Penza, and Sinbirk, as far as the deserts. It everywhere abounds in an admirably rich soil, consisting of a black mould, strongly impregnated with saltpetre. But that part which commences between the sea of Azof and the Caspian, and extending near the shores of the latter, runs between the Volga and the Ural, and then stretching as far as the river Emba, is nothing but a desert, level, arid, high, sterile, and full of saline lakes.

“ The part lying on the other side of the Ural mountains, known by the name of Siberia, is a flat tract of land of considerable extent, declining imperceptibly towards the frozen ocean, and by equally
gentle

gentle gradations rising towards the south; where at last it forms a great chain of mountains, making the boundary of Russia on the side of China. Between the two rivers Oby and Irtysh, and the Altay mountains, runs a very extensive plain, called the Barabinskaja steppe, or the deserts of Baraba, the northern part whereof is excellently adapted to agriculture; but the southern, on the contrary, is a barren desert, full of sands and marshes. The country between the rivers Oby and Yenisey consists more of woodland than of open field; and the other side of the Yenisey is entirely covered with impervious woods, as far as the lake Baikal; but the soil is everywhere fruitful: and wherever the natives have been at the pains of clearing and draining the grounds, it proves to be rich, and highly fit for cultivation. The parts beyond the Baikal are surrounded by ridges of high stony mountains. Proceeding farther on towards the east, the climate of Siberia becomes gradually more and more severe, the summer shortens, the winter grows longer, and the frosts are more intense.

“ In such temperature of climate, the greater part of Siberia, that is, the middle and southern latitudes of it, as far as the river Lena, is extremely fertile and fit for every kind of produce; but the northern and eastern parts, being encumbered with wood, are deprived of this advantage, being unfit both for pasturage and culture. The whole of this part, as far as the 60th degree of north latitude and
to

to the frozen ocean, is full of bogs and morasses covered with moss, which would be absolutely impassable, did not the ice, which never thaws deeper than seven inches, remain entire beneath it."

Face of the country.

In this particular a still greater diversity is observable than in climate. Here are delightful and charming regions, where Nature seems to have dispensed her gifts of every kind with an unsparing hand *; while towards others she has acted so like a stepmother that all appears desert and gloomy. We must not judge of the country at large from either the one or the other of these appearances. If, however, we were to divide the ground and soil into classes, it might be done in something of the following manner, yet without particular regard to the several kinds of earth and strata.

Arable land.

Under this head we must reckon various tracts of land, especially, 1. those that are kept in constant cultivation and tillage, such as are everywhere seen in Great and Little Russia, in the provinces bordering on the Baltic, and many others. 2. Such as

* And yet numbers of foreigners still adhere to the foolish notion that Russia is entirely a rude country, and has not a trace to shew of beautiful Nature.

are only used at times, and left quiet for a great length of time. In some regions, for instance, in Little Russia, about the Don *, &c. where they are looked upon as steppes, which if merely ploughed and then sown, would be productive; in others, for example, in Livonia, Esthonia, and Ingria, where they are rendered fertile by fire, and are called by the countrymen bush-lands †. On such parcels of ground, which are either allotted into particular possessions, or have no proper owner, villages might be gradually erected. In uninhabited districts these tracts are most frequent. 3. Those that are proper for agriculture, but lie totally unemployed: they wait only for industrious hands. There are still plenty of these vast tracts, where millions of men might find work and profit, especially in fruitful steppes, and in numberless large forests.

The fertility of all these tracts is very different according to the quality of the soil. In Livonia and Esthonia, from good fields they reap eight, and in successful years from ten to twelve fold; from indifferent ground about only three, but from better at times sixteen or even more than twenty fold. The harvests about the Don are commonly ten fold; but towards Tomsk on the Tshumush, and in the

* The Don kozak takes, in whatever part of the steppe he chooses, a piece fit for cultivation, and bestows his labour upon it as long as he thinks proper, or as long as its visible fertility will amply reward his labour.

† See Hupel Lief. and Esthl. vol. ii.

whole

whole region between the Oby and the Tom, many fields afford an increase of twenty-five to thirty-fold *; and at Krasnoyarsk the failure of a crop was never heard of: of winter-corn they reap eight of barley twelve, and of oats twenty-fold †.

In Little Russia, on the Don, and in many other places, the fields are never manured, only ploughed, once, just to turn up the earth, afterwards harrowed, and then sown: more culture, especially dunging, would push the corn up too luxuriantly or parch it, and so hurt the harvest; as the soil is sufficiently fertile of itself. Of equal goodness is the ground in great part of Siberia: for example, on the Samara; on the Ufa in the country of the Bashkirs; here and there in the Baraba, or the barabinian steppe; also on the Kama, whence a great quantity of corn is sent to the northern cornless dwelling places on the Dvina and Petshora. In like manner too in the government of Isetsk the soil generally consists of a black earth to the depth of an ell, consequently is proper for tillage, for meadow-land, and garden-ground. On the Oby near Barnaul, the black earth does not indeed go very deep, but the marly clay ‡ that lies under it, fertilizes it so much as to make it, in some places, yield plentiful harvests,

* Pallas, vol. ii. p. 650 & seq. † Ibid. vol. iii. p. 6.

‡ A dark-grey earth, about a foot deep, beneath which runs a layer of clay, and is held in many places to be fine arable land.

without manuring, for twenty years * successively. At Krasnoyarsk, the fields will bear no manure whatever, and yet continue fruitful for ten or fifteen years, if only suffered to lie fallow every third year †. When the fertility ceases, the boor takes a fresh piece from the steppe. On the Selenga, in the district of Selenghinsk, the fields are hilly, and yet will bear no manure, as it is found on repeated trial to spoil the corn ‡.

Meadows.

These are in an abundance not to be described; though here and there a district may be in want of them: but regularly established farms on account of the long winters, require a great supply of hay. At the same time there are large tracts of country, where the meadows (which in many places are called hay-crops, and when they are overflowed by some river every spring, luchten) are not used as such at all, either because the people want no hay, or because from laziness they do not cut it, but oblige their cattle throughout the winter to seek a poor nourishment on the pasture grounds, and sometimes even under the snow.

Hence it follows, that artificial meads, as not deemed necessary, are unusual. Where a want of them is seen, there is commonly a deficiency in land fit for

* Pallas, vol. ii. p. 641.

† Ibid. vol. iii. p. 6.

‡ Ibid. p. 168.

that purpose *, or the people choose rather to turn it into arable. However, some steppes produce the best meadow-grass for provender, and yield seed for making artificial meadows; such as sain-foin, the alpine hedyfarium, clover, various kinds of artemisia, pulse, starflower plants †, and fine grasses that will bear any climate.

All the meadows may be reduced to these four kinds: 1. Fine productive meads that have a good black, but somewhat moist soil: these yield the greatest crops of hay; to them belong the luchten. 2. Dry, whereof the soil is fit for agriculture, and at times is so employed; they commonly yield a short but very nutritious hay. 3. Watery and marshy; these do not produce the best, but give a very serviceable hay in cases of scarcity in parching summers and dry places. 4. Fat steppes, where the grass in some parts grows to the height of a man: they are seldom mown.

Numbers of watery-meadows might be much improved by draining, and where the moss impedes the growth of grass, by cultivation; but these works are rarely undertaken; only sometimes a careful landlord enlarges his meadows by clearing the brushwood, or by adding a fresh piece to them from the forest; but it is generally thought unnecessary,

* Sometimes also a want of people or of time, but most frequently laziness, is the reason that the increase of meadows is neglected.

† Pallas, vol. ii. p. 75.

or at least very difficult, to make them level * ; and therefore many meadow-lands have more the appearance of a desert. — In districts where the grass is bad, rank, and acrid, the horses and cows are gradually accustomed to it, and eat it from hunger, without being followed by any perceptible injury or sickness.

Forests.

Some regions suffer a great scarcity of wood ; and consequently, if not all, yet a part of them are uninhabited : whereas others have such a superfluity of prodigious forests, that no use can be made of them. In Great Russia, which, however, is much more thickly peopled than the remoter regions, these are seen : as a proof we need only mention the great and almost unused forests between Petersburg and Mosco ; as also those between Vladimir and Arfamas, which appear even frightful to many travellers. In Siberia are some still larger ; for example, about the Ural mountains ; in the district of the river Tara ; on the Ufa as far as the Kama ; and the mountainous and uninhabited tract of the forest Ateriskoy, between what lately were the provinces of Perme and Ufa, is seventy-five versts over †.

* To remove the inequalities arising from moles, moss, &c. is difficult, but very advantageous. — The collected hillocks make excellent manure.

† See Pallas, vol. iii. p. 466. 470. and 472.

Where

Where there are no iron-works, no towns nor rivers in the neighbourhood, these fine forests can neither be used nor their products be turned into money. The largest trees fall down with age, or are broke by storms, lie rotting upon the ground, hinder the young shoots in their growth, and give the forests a dismal appearance. They often cut down large quantities without making any use of them. So, lately, on account of the highway robbers, who are apt to infest the forests, great cuts have been made on both sides of the ways, which give a freer prospect, and allow the air and the sun to act with greater effect in drying the road.

There is a great diversity of trees in the russian empire, some of which shall be mentioned more particularly hereafter. The large oak forests in the government of Kazan are spared and managed with care, as the crown is supplied with ship-timber from them. The oak-forests in Livonia and Esthonia are but small; in Siberia oaks are not found to grow.

On the subject of forests a few further remarks are still here to be made. The empress began to think seriously of their proper management, which formerly extended only to particular provinces; but was now to reach over the whole empire. By a decree of the 26th of March 1786, it is ordered that the forests belonging to the crown shall be described, surveyed, surrounded with a ditch, and

regularly set off into portions for felling*. The senate therefore issued its commands on the 18th of December 1791, to the general governors and their lieutenants, for this purpose. — However, it must be confessed that the proper culture of timber, in many, or even most parts of the empire, is still to be reckoned among the unusual matters of office; and that too even where a sensible scarcity calls aloud for the utmost care. A due partition of the falls is but rarely attended to by a private proprietor: the whole of his care commonly goes no farther than to the sparing of an adjacent copse that serves for an ornament to his mansion, or is favourable to the pleasures of the chace, or affords a shelter in case of necessity. From familiar causes several forests about St. Petersburg are kept up with the greatest attention. — The negligence that has hitherto prevailed in these respects has already long ago in some districts put a total stop to their mine-works for want of the necessary firewood. — At the same time it is not to be wished that this œconomy in the article of trees should be carried to extremity, without having a due respect for the constitution of the provinces and

* As to such as are private property every proprietor is left to his own discretion; it being one of the inherent rights of the nation, that every landholder shall have the free administration of his own possessions; and the government has never yet taken any step towards the limitation of the subject's voluntary management of his forests and lands.

the claims of the boors. These, as vassals, can possess no immovable property: all the wood they want they fetch gratis from the forests of their lord; which, from antient custom, they treat as their own property. They may be compelled, however the late regulation may seem to be against it, to confine themselves to the fall of wood allotted for the time; only neither a kameralhof, nor the hereditary lord, or his rangers, must pretend to ascertain how much each boor shall annually take away from the fall; as his wants cannot be precisely calculated, nor are they every year equally great. He will never fetch away more than he has occasion for at home, unless he finds a convenient opportunity for carrying on a petty trade in the article of firing. Even this ought not to be too scrupulously forbid for two reasons: first, because, without this, many towns would be entirely destitute of fuel; secondly, because the boor would thus be deprived of the means of support on a failure of the harvest, or under any other misfortune. There are places where the inhabitants mostly gain their livelihood from the forests; as at Kargapol, for example. Consequently, the management of woods, as practised in England and other foreign parts, could not be altogether introduced into Russia. — The proposal to remove all difficulties by allotting to every cottage its peculiar portion of forest, could not be everywhere executed; and it might likewise give room to apprehend lest the then possessor, by negligence or by too prodigal a sale of

his share, might soon let it go to ruin, if competent overseers were not appointed ; who, as is felt by frequent experience in Livonia, are either thieves themselves, or for a trifle of money will wink at the depredations of others.

Mountains.

Several governments are very flat, and almost one plain throughout ; whereas in others are seen not only lofty mountains standing insulated and alone, but also large chains or ridges of mountains. Among others those of Finland, Taurida, Kamtschatka, &c. But the most noted, and in many respects the most beneficial, is that of the lofty Ural. It may be divided into three parts ; the kirghisian, the part abounding with ore, and the desert, which reaches as far as the frozen ocean, and is still for the most part uninhabited and unexplored. This monstrous ridge is usually held to be the line between Europe and Asia, in such manner that one side belongs to each of these quarters of the world. Pallas thinks * that the arm of it which bears the name of Obshirs, and traverses the country between the river Ural and the Samara, may be admitted as the border as far as the Caspian. — The chalk hills on the Don compose a large chain, with those on the Bululuk †. One principal chain is

* Travels, vol. ii. p. 312.

† Ibid. vol. iii. p. 682. 684.

that

that which forms the natural boundary between the russian empire and that part of Soongoria which now belongs to China ; called, from the Irtysh to the Oby, the Altaian ; from the Oby to the Yenissey, the sayane mountains, and runs between the Amoor and the Lena, even to the eastern ocean *. Generally speaking, all Daouria and the regions lying beyond the Baikal, are mountainous, and many of its particular hills are of considerable height. — Moreover, arms of Caucasus and the carpathian mountains extend into the european part of the empire.

In general, it is to be remarked, that some are covered with eternal snow and ice, while others are clothed with forests and a beautiful herbage. From the fiberian mountains great advantages accrue to the nation on account of the excellent metals with which they abound. Others contain salt-springs, (and even whole mountains of salt,) or sulphureous and otherwise excellent wells ; besides a variety of other valuable products. But there are also large sand-hills, which seem to stand there for no use whatever, and to have arisen merely from the casual effects of inundations : they bear, however, sometimes a sort of grass and herbs. Such are found in the sandy desert Naryn and on the river Achtuba, likewise about the Don, and the Ilovla that falls into it †. — On the peninsula of

* Pallas's travels, vol. ii. p. 510.

† Ibid. vol. iii. p. 540. 548. 683.

Kamtshatka and on some of the islands in the eastern ocean are burning mountains. — The lofty mountains, from the quantity of melted snow, during the summer, frequently cause inundations.

Steppes.

This term does not properly denote low and watery places, or morasses, but dry, elevated, extensive, and for the most part uninhabited plains. Some of them being destitute of wood and water, are therefore uninhabitable; others have shrubs growing on them, and are watered by streams, at least have springs or wells, though they are void of inhabitants; yet in these nomadic people wander about with their herds and flocks, and thus make them, if not their constant, yet their summer residence. In many of them are seen villages. — Some occupy a very large space: thus, it is calculated that the steppe between Samara and the town of Ural'sk * amounts in length to upwards of seven hundred versts; but, as every twenty or thirty versts we come to a lake or river, the Ural-kozaks traverse them when they fetch their meal from Samara. — Probably hereafter several of these steppes, at least in some places, will be cultivated, if they wish to raise forests upon them.

In regard to the soil an extreme variety prevails, either being very fruitful and proper for agriculture

* Formerly Yaik.

or for meadow-land, or indiscriminately for both. Accordingly in the steppe about the Don, the kozaks of those parts employ themselves in agriculture, as well as in the breeding of cattle. Some of them furnish excellent pasture by their fine herbage, as the southern tract of the isetskoi province, and the steppe of the middle hord of the Kirghistzi*. Or the soil is unfruitful: whether it be the sand, the salt, or the stone it contains that is the cause of it. Among these are to be reckoned the sandy steppe on the Irtysh near Omsk; in general we find about the mountains up the Irtysh pure arid steppes, and therefore no villages. Also the Krasno-ufimskoi, between the rivers Belaia, Kama, and Tchussovaia, towards the Ural-chain, is mostly sandy; and that on the Argoun towards the borders of China, is of a still worse soil, consisting of rocky particles and flint. The whole of the steppe along the river Kushum, towards the town of Ural'sk, is described by prof. Pallas† as dry, poor, saline, and unfit for any kind of agriculture, for the breed of cattle, and even for permanent inhabitants; there is not even a solitary shrub to be seen, much less any wood. In general saline spots are not unfrequent in the steppes; and here and there we also meet with salt-lakes: however, such districts may invite to camel-pasture.

* Pallas's travels, vol. ii. p. 75.

† Ibid. vol. iii. p. 525.

Most of the steppes are of a variable soil. So Pallas calls the extensive Baraba, from the Irtysh to the Oby, a beautiful country blessed with game and fish; for though one part of it is saline, yet it contains a great many lakes as well as large tracts very well adapted to agriculture. So likewise is the vast steppe of Kuman in many places sandy, dry, and destitute of water; yet its flats which border on the river Kuma seem formerly to have been well peopled, and at present very favourable to that end.

The steppes are frequently fired, either by the negligence of travellers, or on purpose by the herdsmen, in order to forward the crops of grass; or, it may be, out of malice, as some years since the kozaks of the Yaik did; when, having risen in rebellion, a small corps of russian troops advancing against them, they saw themselves all at once almost entirely furrounded by the high grass on fire. Such a catastrophe often occasions great mischief; the flames spread themselves far and wide, put the dwellings of the inhabitants in imminent danger, consume the corn on the ground, and even seize on the forests. Many prohibitions under severe penalties have accordingly been issued against this practice, but they seldom have any effect *. All the steppes may be considered as a sort of common land.

* See Pallas's travels, vol. ii. p. 378.

Morasses.

Of these also are great plenty, and of various magnitudes. Thus the northern verge of Siberia towards the shores of the frozen ocean, for several hundred versts in width, is one prodigious watery morass, grown over with moss, and entirely destitute of wood, and which in summer is only thawed to the depth of about a span *. In the interior of the empire we meet with smaller; and many of the forests have a swampy bottom: among others may be noticed the tract between the rivers Kama and Viætka, which is very woody and boggy.

They may be reduced under the following four general kinds: 1. Simply low watery land; such is capable of being improved, by letting off the water in the common methods, or by removing the trees that shade the ground, and prevent the wind and the sun from acting upon it; it then may become good meadow and arable land. 2. Swamps, which, when they have but some drain for the water, bear at least shrubs; they yield turf formed out of the moss, and even at times produce a little hay. 3. Bottomless morasses, which appear to be lakes grown over. They frequently will bear neither man nor beast. Only when they gradually thicken their upper shell by vegetation, some grass

* Pallas's travels, vol. iii. p. 23.

may be cut upon them. They admit of no farther improvement than what Nature herself effects by degrees. Sometimes they have a few miserable low bushes upon them, but generally none at all.

4. Moss-morasses, the deep and useless moss of which will permit neither grass nor a shrub to grow, or at most only a few low wretched sticks of fir, &c. which presently wither and die. They are absolutely unprofitable; at least they are held to be so.

Thus we see that some morasses are not without their utility, either by yielding a little hay in dry seasons, or as containing turf, which in parts that produce no wood may be advantageously employed. Yet even the worst morasses cannot be pronounced destitute of all utility: at least in wet, rainy years they draw off a great quantity of water into them, and thereby prevent inundations, even such as would arise from the melting snows, and last a long time; they therefore help to dry more speedily the higher lands that have been overflowed.

Wastes.

Traacts which, by reason of their rocky or at least stony soil, admit of no cultivation; or on account of their deep quicksands, which will scarcely suffer a poor blade of grass to shoot up; or on account of their moss, or their eternal ice, are totally unfruitful, seem to require no particular class, as they may
aply

aptly enough be referred to that of the wild steppes or the horrid morasses. Yet travellers sometimes speak of sand-wastes. One of this sort, open, bare of shrubs or bushes, is seen near Shelesenska * ; also on the Irtysh and in the Baraba are sandy and saline wastes, which never can be turned to any purposes of agriculture †. Still larger is the sand-waste Anketeri, between the rivers Kuma and Terek ‡. But the largest of all, named Naryn, commences between the river Usen and the salt-lake Elton, and stretches quite to the Caspian-sea; yet, on the plains between the sand-hills, are good fields, and might here and there be inhabited §.

Pasture-grounds.

Neither do these properly need to be particularized; for though there are large tracts of land, serving merely as pasture, yet in general fields, meads, forests, steppes, morasses, and even wastes, are used as such. The empire contains them in an innumerable abundance; many, from their fine grasses and fodder, are of uncommon goodness. Hence it is, that in so many parts we have such excellent cattle; and the pasture-grounds, which are, strictly speaking, commons, invite as it were to the nurture of cattle. The whole Ukraine, the country near Archangel, and some of the steppes, are famous

* Pallas's travels, vol. ii. p. 462. † Id. ibid. vol. iii. p. 274.

‡ Id. ibid. p. 541. and 590. § Id. ibid. p. 532, & seq.

for

for their excellent pastures, and consequently for their fine cattle.

By a late ordinance, on each side of the high-roads all over the empire a broad space is left, which may not be granted to any person as property, nor be ploughed nor mown, but remain free that travellers may always find pasture for their horses, as well as drovers for their cattle, along the roads to the various towns.

Salt-places.

These are not usually introduced under the head of land and soil of a country; but in treating of Russia it is necessary, from the inexhaustible quantity of its salt-places, which are of exceeding great importance to the state, to its inhabitants, and to the revenue. Especially in Siberia an amazing quantity of salt is produced.

Salt is a monopoly of the crown; which supplies the empire with it at an extremely moderate price*. However, some provinces are excepted, who either fetch their salt themselves entirely free of expence from the lakes; for example, the Ural-kozaks; or buy it of foreigners, as the provinces of the Baltic; and then the crown takes only the lake-tax. Mr. Pallas complains, in his travels, that from the preparing it at the salt-lakes, from the method of

* Therefore a guard is constantly kept at the salt-places, to prevent persons from fetching salt from them contrary to law.

transport, and from general negligence, it is delivered uncommonly foul; and therefore he recommends the rock-salt, which is easily clarified. Omitting the sea-salt*, we may reduce the salt-places under the following classes:

I. Rock-salt from the salt-mountains. To this class belong, among others: 1. The Iletzk in the region of Orenburg, which is well-known from the writings of several authors. 2. That in the mountain-ridge Arsargal-Shoogot in the steppe towards the Volga; it has not hitherto been sufficiently brought into use, but is exceedingly pure and clear †. 3. The salt-hills about one hundred and fifty versts from Tchernoyar. Probably also the region of mount Bogdo contains the same sort of salt ‡.

II. Salt-lakes, the multitude of which, especially in Siberia, is not to be described; where the salt, without boiling or any other preparation, forms itself, and shoots into thick scales. Of this kind are: 1. That in the Kuman-steppe, whence the Don-kozaks fetch salt in great quantities §. 2. The lake

* Georgi, in his paper for the prize at the academy, has expressly mentioned the sea-salt near Archangel, which he might justly do, as some salt is actually obtained there from sea-water. And there is no reason why the same methods might not be practised elsewhere if necessary.

† And therefore Mr Pallas recommends it; travels, vol. iii. p. 543, & seq.

‡ As Mr Pallas supposes, id. ibid. p. 675.

§ Pallas's Travels, vol. iii. p. 587, & seq.

Elton. The salt that forms itself in this is inexhaustible. 3. Bogdinskoi ● Bogdom Dabassu, another inexhaustible salt-lake, in the steppe towards Tzaritzin. Its salt is better than that of the * Elton. 4. Inderskoi, or the salt lake Inder, in the country of the Ural-kozaks: it is not less than twenty-six versts in circumference, and yields excellent salt. 5. Ebelai, in the country of the Kirghis-kozaks, and particularly in the region where the river Tobol takes its rise. 6. Borfinskoi in Daouria, whence also sometimes Nertschinsk and other places are supplied. 7. The salt lakes of Usen, whence the Ural-kozaks take their salt. 8. The Guriefskoi, some of which, and particularly two, are much esteemed. They lie in the Kirghis-steppe. For a long time the produce of them was brought under an escort to Gurief, where every inhabitant received it gratis from the magazine. 9. The Koriakoffskoi salt-lake, in the steppe twenty-two versts from the Irtysh; the salt of which, amounting annually to 450,000 pood, is brought in flat-bottomed boats to Tobolsk†. — To specify particularly other salt-lakes would be superfluous; but they are in great numbers in Taurida and elsewhere.

III. Salt-springs. There are of these which flow with salt in its proper state, for instance in the government of Irkutsk; but their number is very in-

* Pallas's travels, vol. iii. p. 672, & seq.

† Id. vol. ii. p. 473.

considerable ; and therefore it will only be necessary to notice those where works either are or might be raised. Of this sort, where salt is actually prepared, we find in the government of Perme at three places, viz. 1. In the town of Solikamsk. 2. In the village Ussoliye. 3. In the hamlet Chussoskoi-gorodok. Some belong to the crown, and others to private owners, who deliver their salt to the crown at a price agreed on. — But there are also of the same kind in other parts ; as at Staraia-Russa. Busching is mistaken in saying that the works there are all gone to ruin. General Bauer has very much improved them, and his improvements have been in part introduced in Permia. — The district of Irkutsk uses annually from 60 to 70,000 pood of salt ; and that quantity is prepared there. — Sometimes the pood of salt costs the crown on the spot only $4\frac{1}{2}$ kopecks ; but with the freight in Kungour 12, though in Nishnei-Novgorod no more than about 10 kopecks.

IV. Salt-streams. Salt or saline streams are numerous, besides those which Mr. Pallas has mentioned by name *. Speaking of the stream Solenka, which falls into the Achtuba, he is of opinion that its kitchen-salt would increase by damping it in the heat of the sun.

V. Salt-grounds, which are dry, are found in abundance ; as on the western margin of the sand-waste Naryn, and in the Kuman-steppe ; likewise in the

* Travels, vol. iii. p. 585.

steppe between the town Ural'sk and Astrakan; some are so salt, that many bare places appear entirely white with it. — The Tavri-nor is a dry flat salt-ground in Daouria, extending, in length towards Mongolia, thirty versts, and in its greatest breadth above twenty: it may be considered as a great emptied lake. The steppes of Iset, Ischim, and the Baraba, as also the region beyond the Baikal, are rich in natrous glauber-salt; bitter salt grounds are likewise seen about the rivers Selenga, Chilok, Chikoi, Onon, and Argoun. So the steppe about the stream Kushum, towards Ural'sk, contains many saline places*.

Of the principal mountains of Russia.

The mountains of Russia may be divided into eleven distinct heads, of which the greater part form principal chains of themselves; while others are only continuations of huge ridges, the major part whereof are in the bordering territories. These divisions are: 1. The Sieverniyagori, or northern mountains, extending between the Baltic and the White Sea. 2. The Valday mountains. 3. The mountains of Taurida. 4. The Caucasian mountains. 5. The Ural mountains. 6. The Altay mountains. 7. The Sayane mountains. 8. The Baikal mountains. 9. The Nerchinskaiia mountains. 10. The Okhotskoy mountains; and 11. The Kamtschatskoy mountains.

* Pallas's Travels, vol. iii. p. 585.

I. The northern mountains, between the Baltic and the White Sea.

The mountains of Russian Lapland.

Under this head are to be classed not only those branches which may be considered as continuations of the scandinavian range, and enter on the russian territory between the White-sea and the Onega-lake, but likewise all the mountains of the governments of Vyborg, Olonetz, and Archangel; especially those in the circle of Kola, or in russian Lapland. They lie almost totally beyond the 60th deg. of north lat. and, in length, from west to east, take up a space of more than fifteen degrees. They are for the most part but very little known. The accounts we are in possession of are as follow: they proceed from St. Petersburg, where, about the low country on both sides the Neva, and towards the gulph of Finland, the ground plainly appears to be a mixture of sand and slime, with numerous, often very large pieces of granite, and to have been overflowed and left by the sea. In this ground, some forty years ago, as they were digging a deep canal at Strelna, not far from St. Petersburg, towards the neighbouring gulph of Finland, under several alternate strata of stiff loam and earth, nay even below a stratum of stone, the workmen came to an oaken barge, but little altered otherwise than by the black colour it had acquired, with several human skeletons, and heaps of straw or shilf, perfectly distinguishable.

From Petersburg, quite to Tosnimskoi-yam, we have sandy plains, tending north-eastward till about Olonetz; thence, proceeding as far as the lake Kotk *, where they extend about the foot of a set of mountains, arising from the Finnish hills, consisting of granite and black (probably micaceous argillaceous) slate, diversified with numerous vales and pits, which, continuing south-eastwards, part the sandy level from the just mentioned trappstone mountains, on this side. Continuing our course from Petrofsk (or Petrosavodsk, now the chief town of the government of Olonetz), and having passed the iron-works northwards along the western side of the Onega-lake, over the river Shuya which falls into it, and having reached the mountains that abound in iron ore, we meet with one of the principal curiosities of these parts, in the martial waters of Ussona, Muun-ozero, &c. Here are seen a vast quantity of stems, branches, twigs, leaves, and roots of birch-trees, and other exuviae of vegetables, entirely mineralized by iron, with the diverse texture of the rotten wood plainly visible, in which mineralizations the tender white rind, known to be in the highest degree incorruptible, is preserved quite in its natural appearance, the soil changed into a rich ferruginous earth, and the grassy sod into iron ore. The like transmutations are seen in all the low spots and pits that incline towards the Muun lake, but particularly near the martial waters, and over-

* Kotkozero.

against the village Buigova. Here lie the iron ore in a wide-extended valley, forested apart with birch trees, and with gently-rising hills on both its sides. In this valley, though not in its deepest bottom, issue the martial springs, which, in 1716, by command of Peter I. were fitted with accommodations for public use. The well is sunk about three arshines and a half below the surface, in a hole in the ground consisting of heaps of roots both of trees and herbs (which are partly mineralized) and intermingled with flakes of stone, then an archine and a half in a clayey kind of a stone, mixed with a great quantity of sulphur pyrites. In the deep points of the valley there is a layer of vitriolic earth under the fore-mentioned, which is a mixture of iron earth and swampy iron-ore*. It is easily got, and is then taken to the vitriol works there and boiled. The mountain rock† of the heights rising from the valley is the kind of stone mixed with pyrites before-mentioned on the Brunnensole, mingled with gravel. The western heights incline into the Muun lake, from which the peninsula Deknavolok rises to an uncommon height, and still exhibits the same

* A species of the *raseneisenstein*, *ferrum ochraceum*, *respitium minera ferri subaquosa*; bog or swampy iron ore; phosphate of iron.

† Bergart. The various rocks or stoney substances which compose what in mining is called *the country*, or that part of a mountain which is immediately traversed by the veins composed of ore and the substances which serve as a gangue of matrix.

fort of stone mixed with a surprising quantity of gravel and striated with the same fragments. On the northern or more north-western side of the Onega lake, the trappstone mountains take their rise from the river Shuya, partly reaching to a considerable height, partly flat, partly protuberant, and only towards the upper end of the lake gently rising, detached, and for the most part stretching to the White Sea. These trappstone mountains, in some places interspersed with serpentine, are in several directions, says M. Renovantz, visibly (perhaps only apparently) underlaid * by the marble, as at Tievdeva and Pereguba. Near the former of these two villages, which is not far from Onega, the marble rises out of a river swelling to a considerable height, and *unterteuft*, on its greatest elevation, where are found great quantities of white and grey chalk-stone, interspersed with coppery talc †, copper pyrites, and verdigris, about the trappstone mountains towards the Sondall-lake. It is from this mass of marble, as well as from that on the northern part of the Ladoga lake, near Ruskoll and Serdopol, that the blocks are hewn for the imperial erections at St. Petersburg. This marble, lying in flakes, discovers no trace of petrifications, but is in many places plentifully interspersed with particles of friable quartz, which gives it in several parts the quality of emitting sparks upon collision. In the various lakes hereabouts are islands, consisting of the same chalk-stone.

* Unterteuft.

† Kupferglas.

The trappstone mountains proceed from Tievdeva, both on the shores of the Onega-lake towards the north-east, and in another direction towards the north. In the bay formed in this lake, called Pereguba, projects a low peninsula, named Pertnavolok, apparently from under the trapp, which consists of a quartzy marble. The trappstone mountain in these parts is frequently covered at its foot with strata of granite, trapp, marble, and quartz, and containing ferruginous and cuprous ore, in nests and heaps just under the sod *. The peninsula Ufnavolok on the east side of the Onega bay, and inclining into the lake of that name, and is in immediate connection with the circular chain of mountains, contains several of the like congeries, in which some portions of vitreous copper ore, a few of asbestos, and still fewer of mica, are interspersed. The striae of these substances, thus situated, extend in many scarcely to a fathom, and their surface, according to the depth, still less. Another vein of quartz contains specular iron ore, and green schorl. In the middle of the circular chain of mountains, after the mountain has risen to a very great height toward the north-west, and tending farther again toward the north-west, lies a morass overgrown with firs, pines, and birch trees, from which rises a smaller, and close by that a higher hill. These two hills consist of a grey trapp, slightly mingled here and there with coppery pyrites. Between the hills runs a course of loose sand, in some places a fathom and

* In Taggehængen nestern und geschutten.

a half

a half in depth, in others less, mingled with many large and small pebbles; and under it a heap of from one to two and a half fathoms, as if composed of round grains of quartz run together, and is plentifully mingled with motley and brass-coloured small nodules of copper-pyrites, vitreous copper ore, cuprous talc ore, green and blue copper-ochre, singly likewise with asbestos, hardened small nodules of clay, little trapp nodules, and some few crystal gypsum or selenitical nodules, and through which a waving and inclining cleft extends not more than three inches thick, and filled with sand and micæ. These trapp mountains then proceed towards Lumpuscha on the Onega, and thence, amidst a variety of rivers, morasses, and lakes, on which little granite isles appear; on all sides, forming a delightful scene, shaping their course northward to Voyets or Voytz, a peninsula, laved on two of its sides by the lake Vyg, and on the third by the river of that name which flows towards the White-sea, where is seen a remarkable gold-mine, long since done working. About Lumpuscha the trapp-mountain is violently shattered; huge rocky fragments, struck off from the projecting parts, lie scattered at its foot. The trapp is here much mixed with specular iron ore. Not far off is the Vitzga, a stream with numerous falls, flowing out of the superior lakes, and losing itself in the Onega; on one of its shores, which is quite steep, are lofty sand-hills. Hence, till about Povenetz, these mountains gently decline, covered with

with sand and ponderous masses of granite, to the Onega. Near Povenetz, the river of that name pursues its noisy downward course, over rocks and projecting walls of granite. — In the Vyg lake also several granite islands, among many others, make their appearance, their fossil-quality consisting of feldspar, quartz, and micaceous earth, to the thickness of one's fist; the same is seen in some islands on the coast of the White-sea towards Soroka. The peninsula Voytz, on the other hand, consists of a country of quartz and curved lamellated talc, or a very quartzzy gneiss, which shews itself again about a verst farther to the south, in an island where is an abundance of quartz fragments interspersed with specular iron-ore, and copper pyrites. On the gneissy country of the Voytz-hills appears a coarse serpentine of a greyish green colour. In this gneiss runs a vein of quartz interspersed with blue copper-ore, in which formerly lumps of native gold of some marcs in weight appeared. — This Voytz-hill is separated from the western trapp-mountains by the river Vyg, here forty fathoms broad. Directly in flank of the chain, on the western side of the river, is a piece of mountain, several fathoms in length and breadth, entirely bare of soil, which is a true mass of that quartzzy mountain-rock mixed with talc, amidst other collateral mixtures of the talc, and in conjunction with that mineral subcavating the trapp-stone, which here contains nodules of specular iron-ore

ore frequently as thick as one's fist, and here and there interchanged with serpentine.

About seven versts westward from the Voytzer hill, in which interval several trapp-stone ridges rise, whose natural fossil in many places is replete with little cubes of feldspar, some rock projects on the highest summit of the said mountain, consisting of quartz and talc again between the trapp; and we easily descry in it two parallel veins of quartz, running in a long and strait direction from one to two feet thick, which perhaps are not without hope. — These trapp-mountains proceed yet farther northward, quite to the White-sea; where, lastly, the granite projects close on the shore of the sea, farther to the west, (especially on the bay of Kandalak, and the islands that appear in it,) attains to considerable heights, and exhibits a variety of remarkable phenomena. For example, vast rocks of granite, projecting from the great cataract of the Summa into that river. On an island called Kimalisha, lying between the mouths of the rivers Shuya and Soroka, off the coast of the White-sea, we have in the granite veins of micaceous earth richly mixed with a beautiful brown frequently glandulous, with granites and green transparent shorl; and between Kemmi and Keret are very large sheets of muscovy glass, produced by ignition * from a coarse-grained granite. — Depart-

* Muscovy glass by ignition is not allowed by mineralogists in general.

ing from the Voytzer mountain towards the east, we perceive nothing but the sandy plain diversified with morasses, lakes, and rivulets, from which rise considerable sand-hills mixed with granite, quartz, and pebbles of hornstone, which farther eastward interchange with layers of chalk and gypsum, in which multitudes of petrified marine animals are seen.

Leaving again the before-mentioned martial waters, and taking a farther range and more to the westward, from the Onega towards Pertnavolotok and Muun-ozero, the trapp-stratum proceeds in its simple state for the depth of forty feet and more, consisting of a blackish clay copiously mingled with delicate particles of iron and flat grey squares of feldspar, wherein, in this vein, were several copper-pits, formerly very yielding, but are now exhausted, especially those known under the names of Nadejeda and Nisselskoi, together with that called the silver pit, on strong courses of quartz and spar, which were worked for a space of fifty years and upwards to a considerable depth. — From these pits the mountains tend north-westward towards the borders of Lapland ; yet their principal veins still continue to the north, or rather from the north. Their prevalent substance continues to be for the most part trapp, containing superficial veins filled with copper pyrites. Several of a similar species are seen at Svetnavolok, where the mountain rises quite apart from the rest, and single. Some of these mountains are covered with blocks of quartz of an astonishing magnitude.

nitude. In many places the trapp is changed for serpentine, of a pleasant green colour, as at Sludinskupfska, where a beautiful serpentine, sprinkled with copper-pyrites, spotted with yellow and black, and capable of a fine polish, is found in abundance.

From Svetnavolok the mountains proceed farther to the north, at first bold, then gently, as far as the parts adjacent to the lake Pell; thence pursuing their course to the lakes Ust and Tor, and are covered with huge masses of granite, quartz, and hornstein; at Ufnokontza, and about the Kuman lake, there rises a talcky micaceous schistus out of the trapp. These mountains reach to a considerable height at Moselka, and again toward the west resign the highest place to the granite. From the Kuman lake the trapp mountains run, with fewer changes, westward about the lake Vyg, to Sondola, and terminate in a direction almost due north, at the western bank of the river Vyg, near the gold mines of Voytz.

About Sondola, particularly towards the east, the mountains rise to a considerable elevation, and contain, as their chief mineral substance, a stratum of quartz somewhat mixed with clay. However, they only rise singly, as the foot around is entirely covered with morasses or lakes. In some are perpendicular veins of quartz, with galena, some copper-pyrites, black sparry lead-ore, markasite, sulphur-pyrites, and ochre. In other of the like clefts appear

also

also blue copper-ore, great nodules of copper pyrites, spar, and quartz crystals; in others again pitch-ore of copper, vitreous copper-ore, crystallized blue copper, specular iron-ore, &c.

The Bear islands in the White-sea consist partly of granite, and partly also of trapp. The granite bears a reddish feldspar, quartz, and everywhere but little hornblende. The veins of lead that have been here explored extend, as I am told, in the granite.

The Russian share of Finland is throughout a mountainous country. Towards the north it contains a number of granite mountains, and enormous blocks of the same quality. But more to the south, and chiefly in the region of the Ladoga lake, are numbers of chalk-stone, marl, sand and slate mountains. In some, specimens of copper and lead have been brought out; iron-ore abounds, not only in the government of Olonetz, but also in those of Vyborg and Archangel.

In general it appears from what has been said, that the main ridges, or the greatest elevations of these mountains, come from Sweden; and extend partly from west to east, beyond the northern coasts of the Baltic, and the lakes of Ladoga and Onega, towards and through the White-sea, but partly hold their course out of Lapland too, from the north to the south. For better distinction, (as the name Northern is too general,) we might more properly style these the Lapland mountains. From their outward form, it is clearly manifest that they have undergone
very

very violent revolutions; as they appear, for the most part, extremely broken and incomplete. Their figure is very frequently sharp and prominent; but their height, on the whole, very moderate; though there are many, especially in Lapland, that are never entirely divested of their snow. The higher, namely the principal mountains of these parts, consist of granite, trapp, hornstone, gneiss, and flaky chalkstone, and probably likewise of porphyry and serpentine-wake. About the Onega and Ladoga lakes, in the southern part of Finland, &c. many of the mountains consist merely of thick, not unfrequently red-spotted chalkstone. It is a circumstance peculiar to these parts, that in the morasses, bogs, and low-grounds, they contain an extraordinary quantity of granite blocks, frequently of a prodigious size. It was from this place that the great rock on which the statue of Peter I. at St. Petersburg stands was fetched. The whole of this mountainous country is uncommonly abundant in water, being as it were overstrewn with lakes, rivers, cataracts, brooks, and marshes. In the Baltic and the gulf of Finland, in the Ladoga and the Onega lakes, and in the White-sea, an innumerable multitude of islands appear. — The interior mineral quality of all these mountains, as appears from what has been said above, has not hitherto been found to be remarkably rich, and what gold, silver, copper, and lead courses have been explored in them, were presently exhausted. Iron alone, they still contain in great quantities, and this,

for which there are works in many places, is, if we except marble, granite, some window-mica, and a little labrador spar, sometimes found in the blocks of granite, all that is now got from these mountains.

Besides several rivers, which, like the Neva, mostly take their origin from the lakes hereabouts, not any large river originates from these mountains; though the vast lakes of Ladoga and Onega, and a multitude of inferior note, are in their neighbourhood.

Many of the mountains are bare; but the greater part of them, and particularly the valleys and lowlands, are clothed with forests. The kinds of trees here are mostly the black pine, the birch, the common fir, and the larch. The forests in the parts about the Onega lake are of very great extent. — The generality of the vallies and lowlands contiguous to these mountains are of a black bog-mould, others of well-sand, but some are fertile enough, and decked with fine meadows, where the breeding of cattle is the principal source of maintenance to the inhabitants. In Lapland, and in some other northern districts, wood succeeds but badly, and most of the valleys are overgrown with moss, which is a welcome fodder to the numerous rein-deer of these parts. — In the northern situations the valleys are by no means rich in plants; yet many of the lowgrounds are amply stored with berries and a variety of mushrooms. But, on the other hand, these countries abound in wild animals, and an inconceivable

quantity of both land and water fowl of various denominations.

The Valday mountains.

These mountains, whose ridges we travel over in going from Petersburg to Mosco, are probably but a continuation of the Lapland mountains already described. They were known to the antient geographers by the name of Mons Alaunus. At present they are indifferently called Vhisokaya Ploftchade, high rising ground, or the mountains of Valday, from the town and the lake Valday which are situated on their tops.

At no greater distance than ten versts from St. Petersburg, on the Mosco road, we already see great quantities of masses of granite strewed over the fields around, on which the feldspar is almost entirely effaced*. The soil is at first, and as far as twenty versts, mere moor ground. At Slovenka, twenty-two versts from St. Petersburg, we first meet with some clay-hills. Farther on, the country again becomes swampy and sandy; but at the same time strewn with vast numbers of blocks of granite, some of them enormously large. Among these masses are also large blocks, with radiated and lamellated schorl. Till we get upwards of one hundred versts from the residence, the country is everywhere low, and we travel through almost one continued forest; but now it becomes somewhat higher, and the soil

* *Verwittert.*

more clayey. We likewise come to several villages. Large granite rocks are here particularly numerous. Having again passed several great morasses, we reach Novgorod, in a country thronged with hills of marl, sand, and clay. The well-sand, whereof a great part of the way already past consists, is in many places of a reddish hue, and everywhere mixed with many granite, quartz, and chalkstones. To the right of the great high road, and southward from Novgorod, lies the Ilmen lake, in the parts adjacent to which are many chalkstone beds, with bridges over them, petrifications, and salt-springs. The last-mentioned are at Mshaga, Saltzvecksha, Uglenka, and Staraia-Russa. On leaving the last of these towns, we have the Seliger lake and the sources of the Volga in the south-east. We cross the river near Lovat, and proceed along the Pola, as far as the mouth of the impetuous river Ivan. Here, about the Ilmen lake, and in nearly the shape of a crescent, arise the Flotz hills, which, gradually, on the Shelon beyond Saltzi, on the Lovat, about twenty versts below Cholm, on the Msta at Belskoi-volost, and on the Siæs at Tichvin, increase to a very eminent mountain-ridge. Below the mouth of the Ivan or Yevan, along which the stoney stratum, as about the sources of the Siæs, is the highest and the steepest, flows the Pola for several versts over a bed of marl and sand slate. At this place there is a great deal of potter's clay, of which all kinds of earthen vessels for common uses are made.

Following the Mosco road from Novgorod, across the mountains, to the distance of thirty versts farther, we have a hilly ground, partly of sand and partly of clay, to pass over, on which the blocks of granite, quartz, and sand stone are very numerous, and of considerable bulk. About Novgorod the earth is in some places so loamy and heavy, that great clods of it lie upon the fields, and prevent the coming up of the seed. Near Bronitza, a spacious village on the Msta, lie a great many granite stones, some whereof are extremely large; especially those that one sees on a pretty high hill, on which there stands a church. The largest lie mostly on the north declivity of the hill. On a particular spot, upon the shore of the Msta, there is a bed of quartz sand at least three arshines in depth, under which runs a layer of clay. Hence to Bolotnitza the ground is still much more hilly, and the granite blocks more numerous. Among these there are also many pieces of jasper, trapp, and quartz. From this village to the town of Valday is a distance of forty-four versts. Nothing is seen here but great hills covered with sand, and frequent masses of granite. On these hills, where, however, we never once saw the naked granite pushing upwards, the granites are of a variety quite peculiar. They are found from the finest grain, up to blocks of very large dimensions, and of red, grey, bluish and blackish colours. Sometimes the quartz, then the feldspar, one while the hornblende, at another mica, and at another a fine needle-shaped

shaped schorl, has the ascendant. Together with the granite there is also found much quartz, some porphyry and jasper, and pieces of schneidestein, or steatites. Of the latter sort Mr. Hermann found, among others at the village Votkoy, about 324 versts from Petersburg, a large block (not rounded off) of upwards of one hundred pood in weight, having many within-lying brown spiculæ of schorl and small transparent red brown granites. The country about Valday, being the highest point of the mountain, is extremely pleasant. Fine, slow-rising hills, a charming pellucid lake, with an island on which stands a noble monastery, delightful groves, an extensive scenery, forming the most inviting variety. One scarcely thinks himself on the mountain, and is almost inclined to take this region for a kind of plateaux, so gently do the mountains raise their heads.

At a few versts from Valday the road begins to decline very fast. The granite blocks on the mountains covered with sand and clay, are still in great numbers, but by far not so large as on the opposite side. There even already appear a good many petrifications in chalk and flints. The latter are frequently of the jasper kind. — Towards Vishnei Volotshok the road goes again over little hills, swampy and well-sandy ground. On many plots, and even till within twenty versts of Vishnei Volotshok, there is a multitude, and some of them very large blocks of granite. Several of the well-sand hills contain lumps of granite, quartz, sandstone, limestone, and flints, all together, in great numbers. It is remarkable, that we

here meet with many blocks of sandstone, while they are very rarely to be seen on the north-west side of the mountain. — Between Vishnei Volotshok, and especially in the district of Nicolskoi monastir, the country is plentifully strewn with petrifications in firestone and chalkstone. Among them are found echinite-stalks that are transformed into carnelian.

Between Torshok and Tver the country is flat, and the quality of the soil much like that above described. They use here for buildings a sort of white marly stone, which contains great quantities of broken shells, and solitary ammonites petrified into chalkstone. On the other side Tver the firestones are far less common on the surface. About Klin we find again several clay-hills, in which stick large blocks of granite and sandstone; also firestone, with and without petrifications, and pebbles of chalcedony. From Klin to Mosco the soil is very clayey, but always mixed with some blocks of granite. The region about Mosco offers great abundance of beautiful petrifications, and especially of pyritical ammonitæ into pyrites, prettily embellished with mica of a metallic lustre. Along the Vachusa, by the Volga, we see myriads of pebbles of all sorts of colours; and farther on, in the district between Mosco, Kaluga, Smolensk, &c. much chalkstone inclosing great quantities of shells of various species.

The highest point of this ridge of mountains is, therefore, Valday. It shapes its course hither from the north, and appears to take its departure from be-

tween

tween the lakes Ladoga and Onega. It then stretches across the Msta, runs between the Ilmen lake and the Seliger, and extends its foot as far as into the governments of Smolensk, Orel, and Novgorod-Severski. About its western, southern, and eastern declivities, are several strong strata of chalk and marl, which farther on are lost in marshy and sandy plains.

Some naturalists are of opinion that the whole of this Valday chain of mountains is the effect of violent inundations, and that it entirely consists of a chalkstone arisen from crumbled and destroyed marine productions. Highly possible as this conjecture is, it may be no less likely that the middle part is a primitive mountain, having granite for its principle stratum, which, through length of time, and perhaps even under water, is so much decayed as to be in a manner smoothed; for, as far as I know, no chalk-pit has yet been opened on its summit; and how much soever, some blocks of granite on these mountains are rounded off, yet we see a great many that are so but in a small degree. But even if all these masses were rounded, it would still be no proof that they were all brought hither by the flood. Of those by Bronitza in particular, this would be extremely difficult to believe. I therefore take all these elevations, till some very solid reasons shall convince me to the contrary, to be an original mountain decayed and destroyed on its surface, on which, round about its declivities, the loose chalk and marl was floated or deposited.

Notwithstanding so much is to be said concerning the mineral quality of these mountains, no mine has as yet been explored among them. Some specimens, indeed, it is said, have been brought up of copper and lead; but the attempt has been prosecuted no farther. There is plenty of iron; especially at Poterpelitz, where it seems that a bed of pyrites by accident taking fire, it left large pits, and deep cavities in the earth, which afterwards filled with water, and are now little lakes abounding in fish. The heat of the fire, however, must needs have been very violent, as the martial parts of the pyrites were perfectly in fusion, and flowed together into iron-stone, partly porous, partly solid, without having left behind any ejections, or other signs of this tremendous phænomenon, a burning mountain. It is more certain that the bottom of all the lakes is of this confluent ironstone. The beds on the Msta contain a great quantity of sulphur pyrites, vitriolic earth, alum, coals, iron-ore, petrifications, &c. The pyrites are found, of every known figure, and of excellent lustre. A bed of coal stretches principally about Borovitfk; and salt-sources, chalk-pits, and gypsum, are found in Stara-Ruffa.

The extreme elevation of the Valday mountains is but very moderate; as the highest point is scarcely two hundred fathoms above the level of St. Petersburg. Upon them are not only the Valday-lakes, but a so some others of inferior note; and at its western foot, is the great lake Ilmen, at the southern, the

the Seliger, &c. Of the rivers, some take their origin from the mountains, others from the lakes that lie at their feet: The Volga, the Duna, the Volkhof, the Lovat, the Pola, the Tshagedo, the Kolp, the Dneiper, the Don, the Oka, &c.

These mountains are but sparingly clothed with forests, but so much the more with beautiful meadows and fields; hence the grazier's trade is here carried on with considerable profit. The species of wood are, the several sorts of pines and firs, the birch, the linden, the aspin, the alder, &c. The soil in the valleys mostly consist of clay and marl, and is in general fertile.

The mountains of Taurida.

The peninsula of Krim, from the neck of land where the fortress of Perekop stands, is all a flat, which gradually becomes higher, till at last it rises into lofty mountains, which form the southern side of it, and the shore of the Euxine sea. The range of mountains extends from Theodosia in a straight line westwards, quite up to Balbeck. At Karasubasar two towering pinnacles shoot up, and at Akmetchet a very lofty one, which is called Aktau. The smaller mountains stand distinct and scattered. It is extremely probable, that this range is partly a continuation of the caucasian, and partly of the carpathian mountains; and that these two principal chains are connected by it; which also seems apparent from the nature and quality of the mountains
opposite

opposite to those of Taurida, which extend beyond the Danube, through Bulgaria, and are called Pulkanian.

The component parts of the mountains of Taurida are as yet but little known. Thus much is certain, that the greater part consists of chalk-masses with petrifications, and many beds of sand and marl, and chalk-hills with flints. It is therefore to be presumed, that in general they are not to be classed with the original, but only with the alluvial or deposited mountains. A part of them are thought to owe their origin even to the subterranean fires. However this be, it is said that lead, copper, and iron ores are found in them, as well as jasper, agate, and mountain crystal. In limestone, marble, slate, sandstone, coals, naphtha, and common salt, they are very rich. — The isle Taman consists merely of beds of sand and marl, without limestone.

Their height, in comparison with other chief-mountains, is but moderate. They are in a great measure destitute of forests. The trees that grow upon them are those of the richest foliage, such as oaks, beech, chesnuts, &c. However what they are deficient in wood, is amply made up for by the rich and beautiful herbs of the vallies.

The rivers that take their rise from the mountains of Taurida are, the Alma, the Katsba, the Kabarda, the Salgyr, the Karassu, and a great number of little streams that in many places form very pleasing natural cascades.

The

The Caucasian mountains.

The Caucasian mountains, as far as they have hitherto been explored on the russian side, are truly an alpine range, extending, between the Euxine and the Caspian, from west to east, in length about three hundred and fifty english miles, and towards the north and south in a level country all around. They greatly decline as they approach both the seas. The whole range has a tract of about five miles in breadth, where the chain is at its greatest height, which is covered with eternal ice. Its breadth on the northern declivity extends at most to fifty miles, and runs along on the prodigious northern plain, which, taken in the quadrature, measures one thousand english miles, being bounded on the east by the siberian, and on the west by the valakhian mountains. The icy ridges, as well as the others, at their highest points, consist mostly of granite, the sides leaning towards the next mountains, of all kinds of slate, and the outward sides of limestone, &c. This limestone mountain runs in a flat clayey field of twenty miles in breadth, gradually declining, till it ends in a promontory ten miles broad, which consists almost entirely of sandstone; and this again runs out afresh in a clayey plain about eight miles broad, in which likewise numerous sandstone-hills arise. In this plain common salt and natron are met with in great abundance. In the promontory are ironstone, sulphur-pyrites, vitriol, petroleum, and warm baths not unfrequent; petrifications are likewise found here,

here, though not in great numbers, mostly in flint. Specimens of lead and copper are rarely seen in the promontory, but in the higher mountains frequently. The slate contains alum. A piece of this caucasian ridge is said to have no waving mountains at its northern termination. As to what regards the quality of its superior regions, it is to be remarked, that the river Hippius in Iberia bears gold, the mountains in that region are said to be very rich in minerals, and that the gold mines at Cumana were already worked by the Romans; that the mountains on the Kura, and especially in the district of Azghur likewise contain very rich ores; that in the plains of that river are found fine marble, coal, and warm springs; in the mountains by the Terek, as far as the village Stephantzminda, there is lead, silver, and iron ore; in the georgian province Somghetia, rich silver and iron ore, marble, and jasper; in the circle of Quoetsh copper-ore; in the principality of Tamblut rich lead, silver, and gold mines; in the principality of Lori considerable copper-mines, good millstones; in the principality of Unfular rich copper-mines; in the parts about Akdale, gold, silver, and copper; and in the province of Albania, marble and alabaster, iron, warm baths, petroleum, and rock salt.

Hence it appears, that the caucasian chain of mountains is a main course, in its highest points covered with ice-mounts; that it has its highest, high, middle, and fore-mountains, or promontories, the risings nearest to the level of the plain; that its sides are very rich in minerals, and probably, in those

those parts which are now added to the russian empire, contain a treasure of the precious metals. Its eminence, on the whole, is considerable, and many of the rocky parts very steep and prominent. In many of its extremely fertile vales it is furnished with charming woods, consisting of excellent forest trees of various kinds. — On the russian side of these mountains, the rivers Terek, Kuban, Kumma, and a number of smaller streams take their rise.

For rendering this account as complete as possible, I will here subjoin a few particulars from what Guldenstædt says of Caucasus. “ The main mountain,” says he, “ or rather the high ridge of the “ main mountain, from which the whole on both “ sides declines and sinks towards the seas, consists “ mostly of snow or ice mounts of a truly alpine “ height, which, by reason of their local elevation, “ particularly in some open fissures, contain everlasting snow and ice, generally exhibit bald rock, “ without any covering of earth or plants and trees, and “ in some parts pierce into the clouds. This, which “ may properly be called an alpine chain, seems to “ me not more than five to seven versts in breadth, “ and consists of a granitic stratum. — The two sides “ of the high alpine ridge, which form the main “ mountain, I take to be, from south to north, or right “ across, measured in several places, on an average, “ seventy versts. They stand immediately in the “ main ridge; and the north side is visibly steeper “ or higher than the southern, as it declines in a far “ narrower

“ narrower or smaller breadth, or rather only sinks
 “ down towards one part. — The highest ridges
 “ of Caucasus consist of granite; close to which,
 “ both on the northern and southern sides, are
 “ mountains of slate, and farther on, chalk-hills,
 “ which terminate in sand-hills. In the latter are
 “ found sulphur, sulphur-pyrites, warm sulphureous
 “ springs, petroleum, rock-salt sources, nitrous salts,
 “ bitter salts, magnesia vitriolata, alum, selenite, &c.
 “ — The northern promontory flattens partly at the
 “ Kuban, and partly over it, and at and across the
 “ Terek, northwards, in the vast, arid, clayey,
 “ sandy, salt, woodless steppe, which towards the
 “ Manytsh is called the Kuban, and towards the
 “ Kumma the kummanian steppe, and occupies the
 “ space between the inferior Don and the inferior
 “ Volga. — In the northern track of slate, appears
 “ ceruse of lead, which contain silver, and copper
 “ pyrites in slaty strata, in courses of quartz and
 “ spar, in various veins, particularly four in the
 “ province of Kisteri in the district of Galgai, on
 “ the river Assai, between the villages Osai and
 “ Cheirechi. Courses of bleyglantz are seen also
 “ above, on the Terek, in the georgian district of
 “ Kovi, in the district of the old fortress Dariella.
 “ Other lead-ores are found on the river Pog, by
 “ the brook Tshidshai, near the villages Tshimeti
 “ and Tsharkau, on the right side of the Aradan,
 “ of the Terek, in the district of Dugor, near the
 “ village Nakatza. — The slaty mountain near the

“ Affai, is very rich in ores, especially about the
 “ head of the Archoun, the Sundsha, the Kifil, the
 “ Pfok, and the Aredon. About the Terek, it
 “ yields also copper and alum. Iron-stone abounds
 “ in many parts of these mountains. — From all
 “ this we may safely conclude, that mining might
 “ be begun and carried on in the northern Caucasus
 “ to great advantage, especially for Russia; only
 “ care must first be taken to establish strong and
 “ well-garrisoned forts for the protection of the
 “ miners against the ravages of the thievish tribes
 “ that inhabit the mountains, till they have attained
 “ to a greater degree of civilisation, and even them-
 “ selves take a turn for mining *.”

The Ural mountains.

This famous chain of mountains, which forms
 the natural boundary between Europe and northern
 Asia, is commonly called the Ural, or the belt, as if
 it girted the whole world. The antients gave this
 chain the appellation of the hyperborean and the
 ryphean mountains, and sometimes Montes Rhymnici.
 Under the last of these denominations the bashkirian
 Ural was more particularly designed. The northern
 Ural they termed Montes Hyperboræos, or Riphæos,
 and the southern Rhymnicios. The former were
 afterwards also called the Yugorian mountains. Ural
 is a tartarian word, signifying a belt or girdle, by
 which the Russians likewise denote this range; for
 they call it Kammenoi and Semnoi poyas, that is,

* See Guldenstädt, reise, theil i. s. 433, & seqq.

the

the Rock or Earth-girdle. These mountains extend, from south to north, almost in a direct line, greatly above 1500 english miles. The mountains between the Caspian and the lake Aral may be considered as their commencement, which attain their greatest height and bulk about the sources of the rivers Ural, Tobol, and Emba ; from thence stretch on towards the origin of the Tshustovaia and the Islets, and farther on to the sources of the Petshora and the Sosya ; lastly form two great promontories about the karian haven of the frozen ocean ; and after being divided by the straits of Vaygat, reach their termination in the mountains of Novaia Zemlia. Such is the main course of this prodigious chain, which issues from the higher asiatic mountains, is gradually lowered, with several frequently imperceptible interruptions, and lastly sinks in the frozen ocean. — Some considerable collateral branches take a western as well as an eastern course from it. The most material that extend from the former side are those called Obschtschei-Sirt, the mounts of separation, which run out between the river Ural and the Sakmara, and on one side unites with an arm coming out of the kirghistzi steppe on the left shore of the Ural ; on the other side projects into the old kalmuc steppe between the Volga and the Ural, and northerly is in conjunction with the sandstone mountains which accompany the main course of the Ural on the western side. — Near the forts of Orsk and Guberlinsk, a part of
the

the mountains run out south-eastward into the kirghistzi deserts, and reach to the mountain Ulutau which stands about the centre of that region, and is attached to the great Altay. This arm, extending near the abovementioned forts towards the south-east, is called the Guberlinskoi mountains.

— Another course, smaller than the foregoing, runs south-eastward between the rivers Ural and Ui, under the name of Okto Karagai, through the open steppe of the middle horde of the Kirghis-kaifaks, and then pursues its way, under the appellation of Alginiskoi-Sirt, towards the Irtysh and the Altay mountains.

The whole Ural chain may be aptly divided into three main parts: 1. The kirghistzi Ural, which extends from the Caspian and the Aral, and eastward out of the great steppe of the Kirghis-kaifaks, as far as the origin of the Tobol and the Yemba. 2. The Ural rich in ores, properly implying the Ural ore mountains, which takes in the whole mountainous track, with its western and eastern appendages, from the rise of the said rivers and the Guberlinskoi mountains, quite up to the sources of the Solva and Kolva; and 3. the desert Ural, extending from these rivers to the frozen ocean. The Ural that abounds in ores may be again subdivided into the orenburg, the ekatarinenburg, and the verchoturian Ural.

This main course of the Ural mountains has one peculiarity, that it declines incomparably more on

its western side than on the eastern, and on the former is accompanied by a considerable track of collateral ridge, very rich in copper, and consisting for the most part in schistose sandstone.

The highest mountain of the Ural chain is in the Bashkirey, (or in the orenburg Ural,) and in verchoturian Ural. Yet the former far exceeds the latter. They are mostly met on the side of the range inclining to the west; as, for instance, the Iramel, Psetak, Taganai, Dshigalgo, Agehurdyk, Imen or Yamontau, &c. But likewise on the east side are some very lofty heads; for example, the Irentick and Karantash, from which latter the river Ural takes its birth. In verchoturian Ural the greatest elevations are the Vostroi-kammen, the Konkeshefskoi-kammen on the Lobva, and the Pavdinskoi and the Kosvinskoi-kammen on the Tauda. Some of them, as the Agehurdyk, the Dshigalgo, the Taganai, the Konkeshefskoi, Pavdinskoi, and Kosvinskoi-kammen, are in several places covered with eternal snow. The ekatarinenburg Ural contains the easiest mountains, thrusting up their summits for the most part only in hemispheres of greater or smaller dimensions.

The kirghistzi Ural is almost entirely unknown to us; and we are not much more acquainted with the great desert Ural. However, it is thought the latter goes on increasing mostly northwards, over the source of the Sosva, and at last stretches, almost parallel with the Oby, towards the frozen ocean; where

where it sends out a branch of schistous mountains to the westward, which, with another neck of land, forms a bay in the Oby, terminating as if shattered to pieces, with a part of the same schistous quality, on the coast; but running on with its strongest part to Novaia Zemlia, and perhaps issues also a branch westward through the lake, which is full of rocky islands, quite to the lapland mountains.

The Ural chain is of itself a main mountain, whose highest ridges, for the most part, consist of granite, and of all the properly primitive rocky materials; the sides being more of schistus and wakes; the fore-mounts, or promontories, especially on the western side, of sandstone, chalk, and gypsum, and the beds of marl, clay, sand, &c. But this statement admits of several exceptions. Thus, for instance, we see that the granite pushes upwards not only in the highest, but also in very low points; that on the high ridges, together with the granite-knobs, there are likewise in many places porphyry, gneiss, mica spathosa, verd, serpentine, sand, and marlstone, micaceous schistus, and lapis calcareus salinus, which frequently seem to be laid on the granite, but often only placed beside it; and that in the fore-mounts and beds, chalkstone, schistus, sandstone, and gypsum, are so interchanged, that it is impossible to say which of these properly serves as the suppositum to the other. — The orenburg Ural has whole knobs of solid horny quartz, and many mountains of extensive compass; for example, the

Guberlinskoi, which almost entirely consist of fine jasper. The schistose track, or what is called the mountain-gangue, is not much more plainly perceivable on the eastern side of the principal ridge, than on the western, where it seems almost entirely to fail. Gneiss, micaceous schistus, pot-stone*, grey marl, and serpentine wake, grey clay schistus, trapp, and jasper, interchange without any apparent regularity, and are variously interrupted by protruding lapis calcareus salinus. The case is just the same in the eastern sub-mountains, with the thick and broken (mostly free from petrifications) chalkstone, gypsum, black schistus and sandstone, beds of marl and clay, &c. the succession whereof are different in almost every region. — On the west side succeed, mostly close by the high mountain, a grey and black clay schistus interchangeably with fine sandstone; and a powerful mountain, extending from the Belaie northwards over Solykamsk of thick chalkstone, which forms in many places very high and broken mounts, and westwards is accompanied in its whole length by hills of gypsum and sandstone, in the former whereof rich salt-springs, and in the latter very productive beds of copper, lie concealed. Where this chalk-mount borders on the higher mountain, numerous and large nests of iron-ore are every where met with. Whereas on the east side, and on the ridges of the mountain, the richest

* Or, *Lapis ollaris*.

copper and many iron ores break in the parting of the saline chalkstone with marl-wake, the most powerful couches of iron-ore, of porphyry, and the gold-ore in the gneiss.

In minerals the Ural mountains are very rich. We find beautiful sorts of granite, porphyry, excellent jasper, fine quartz, petrosilex, pebbles, whet-stones, flints, agates, chalcedonies, large mountain crystals, smoky topazes*, fine amethysts, chrysolites, porcelain and pipe-clay, bolus, shelly feldspar, serpentine, pot-stone, window-micæ, asbestos, and amianthus; beautiful marbles, table schistus, gypsum, flowers of spar, turf, coals, mineral oils, naphtha, native sulphur, markasites; fossil salts, sources of common salt, bitter lakes, alum, vitriolic earths, saltpetre, natron; iron, copper, gold, and specimens of silver and lead. For working of the gold, copper, and iron, very extensive and productive fabrics are here erected.

The Ural mountains are also very amply endowed with woods. Their trees consist of the several sorts of pines, birch, fir, cedar, larch, aspin, alder; and on the south-western side a few oaks, elms, lindens, &c.

In the vallies adjoining to this range of mountains we everywhere meet with rich and verdant glens and dales and meads in alternate succession; accordingly the breed of cattle is not inconsiderable. Of

* Smoky topazes, mean brown rock crystals.

wild beasts and birds they contain great plenty. Among them may be reckoned fables, beavers, rein-deer, elks, &c.

In the ordinary course of years they abound in waters; and the various elevations are copiously supplied with beautiful pellucid lakes, ponds, and numberless streams, all teeming with fish. The principal rivers that here take their rise are: the Sofva, the Tura, the Iffet, the Ui, the Tobol, the Yemba, the Ural, the Belaia, the Tshuffovaia, the Kamma, the Petshora, &c.

The Altay mountains.

The mountains which, on russian ground, belong to the system of the high rocky ridges of Altay, take up the whole breadth between the Irtysh and the Yenissey. They terminate, or rather depart from that mighty chain of mountains, which, as far as is hitherto known, stretch, in a south-eastern direction, from the fortrefs of Semipalat on the Irtysh, unite beyond the Yenissey, with the sayane and baicalian, and in Daouria with the argusian or nertschinskian mountains, and thus fix the limits between Siberia and the chinese empire from the Irtysh to the Amoor.

The Altay mountains are called by the Chinese, Altai-alin, and Ghin-shall, which signifies the Gold Mount. They are divided into the great and the lesser Altay. The great Altay separates the mongo-

lian Tartary from the empire of the soongorian Kal-mucs and a small part of Bukharia toward the west. This range proceeds in various windings toward the north-north-east, here throws out several considerable ridges, between which the main sources of the Yenissey, the Oby and the Irtysh rise, through Soongoria to the north-north-west, where they enter in conjunction with the lesser Altay. The lesser Altay parts Soongoria from the government of Kolhyvan, through which the aforesaid streams pursue their course over a great extent of country.

The greatest height of these mountains is without the limits of the russian territory. They run out in general from one of the highest points, known by the name of Bogdo, over the sources of the Irtysh, north-westward between that and the lake Tetzkoï-ozero, and by this lake and the Yenissey north-eastward into the russian empire. The whole of the russian share of the Altay mountains, therefore, naturally falls into two great halves; one of which comprehends the entire space between the Irtysh and the Bii*; and the other, the space between the Oby and the Yenissey. For the sake of more accurate intelligibility the former is styled the kolhyvan, and the latter the kuznetskoï mountains. Both include the greater part of the government of Kolhyvan, and belong entirely to the department of the kolhyvano-voïkreïenskoï mine-works. The former

* Farther on the Oby.

half, namely, the mountains between the Irtysh and the Bii, or Oby, might, on account of its mineral wealth already known, be styled by way of eminence, the Altaian ore-mountains.

Of all the mountains in the central Asia, those of Altay seem the mightiest, the most extensive, and the most conjoined. They do not, however, throughout bear the name of Altay. The lofty track which parts the government of Kolhyvan from the chinese Soongoria divides into two great joints. One from the Irtysh to the lake Teletzkoe and the head of the Abakan, is properly the lesser Altay, or Khrebet Khalbä; the other, from the Abakan to the Yenissey, is called Sabinskoy Khrebet. In the former are the greatest elevations of the kolhyvanian, and in the latter those of the kusnetzian mountains; they therefore form the basis of all the ribs or mountain-tracks that shoot out from it to the north-west and to the north, which at last lose themselves towards the Frozen-ocean in prodigious plains; while towards the south, as it appears, they still continue to soar to an uncommon height over a long and broad extent of territory.

Right in the midst of these tall mountains, says Dr. Pallas, and on the frontier line between the soongorian and mongolian deserts, Bogdo-Dola, or Bogdo-Alim (the almighty mount), so eminently famous amongst all these nations, lifts its pointed heads; which, if not one of the highest, is yet,
by

by its craggy, steep, and irregular form, with all the appearance of having been thrown up by some violent agitation of the earth, the most striking of all the powerful mountains of these parts. North-westward from it, all the main mountain as far as Altain-Kul, or Teletzkoe-ozero, is called the Golden Mountain. Eastwards towards Mongoley, more to the south, runs a strong mountain Changay, and southwards a powerful snow mountain Maffart, which either annexes to the tybetan, or to the northerly mountains in India. Lastly, westwards the main mountain throws out an arm, mostly bare of forests, and all over as if studded with rocks, called Allakoola, i. e. the Checquered Mountain, by the Tartars Ala-Tau, which connects with the kirghistzian Alginiskoi-Sirt. Between the Muffart and the Alak arise the rivers Sir, or Shir, and Tallas, which flow to the lake Aral, northwards out of the Allakoola, the Ili rolling its waters to the Balkash-noor, the Emil and the Tshui, which is sometimes dry; and north-westward from the Bogdo the upper Irtysh takes its source. Probably the great Altay mountains concatenate with the tybetan mountains by the Muffart, and perhaps by other chains. For all the deserts between Siberia and India, and the eastern Bukharia, are nothing but alternate hills and plains, and extremely rocky. That also the Altay mountains must make an uninterrupted partition between the western steppes and the eastern regions, is shewn by the steppe-animals, particularly

particularly the antelopes or steppe-goats, who shun the mountains, and even in Asia go no farther than to the western range of the Altaïs, and are come from it northwards to the woody regions that accompany the Oby.—The snow-mountain, which appears northwards on the Siberian frontiers from the Irtyshtau between the Buktarma and the Katuria, and quite into the angle formed by the rivers Ina and Belaia which flow into the Tsharysh, is, as it were a division, a short branch, a nook of the great Altaïs, which by some is usually called the little Altay, and which darts its stupendous pinnacles above the clouds. It rises everywhere bold and steep, and stands (especially in the vale where the Ina unites with the Tegerek) like a towering wall, behind which the mountains rise constantly higher in irregular gradations, and at last strike up in separate points. The same steep vale there parts the schistose mountain from the chalk-stone mountain, which hence spreads northwards between the Ina and the Loktefka quite to the Tsharysh. Over the schistose mountain the snowy summits rise conically out of a granite mixed with schorl and mica. The same granite shews itself again in chalky promontories, with the schistus lying on it; and forms the Revnovaia Sopka, as it is called, at the same time, right in the bosom of the chalky mountains, the still loftier Sinaia Sopka. Granite appears likewise throughout in low, rocky, craggy mounts and single cliffs, between the rivers Ubo
and

and Alay, where the mountain has already fallen deep towards the plain, and likewise about the lake Kolhyvan. The rich ore-mountain of Kolhyvan places itself immediately between and about this granite-stock; and thence arises an apparent confusion in the strata through the whole of the Kolhyvan ore-mountain. On the Irtysh the schist-mountain extends latitudinally as far as Semipalatnaia. The wavy red sand schist ridges between the Shulba and the Ufa, seem to rest upon the schist. Between the Alay and the mountains stretching to the Irtysh, is also a perfect plain, without a trace of hilly scites, with many salt-pools and petty lakes, and the promontories everywhere gently decline towards this plain, and are completely destitute of forests. Genuine hornschist and jasper are here not to be found in the whole mountain, neither, except the outermost hills that proceed by the Irtysh below Semipalatnaia, is any true floets mountain perceptible.

The principal part of the Altay mountains that fall to the share of Russia, is the range of Kolhyvan, or the proper ore-mountains of Altay. For the more convenient comprehension of it, it may be reduced to the following subdivisions, namely:

1. The Kolhyvano-voskresenskoi.
2. The Korbo-likinskoi.
3. The Alaïskoi.
4. The Ubinskoi.
5. The Buktarminskoi.
6. The Teleskoi; and,
7. The Tshariskoi mountains.

“ The

“ The Kolhyvano-voskresenskoi mountains have their appellation from the adjacent lake Kolhyvan, (which has given its name to the whole chain between the Irtysh and the Oby, as well as to the government) and from the first copper-mine, called Voskresenskoi. It is bounded on the south by the granitic ridge which parts this mountain from the korbolikinskoi. It is confined to the east by the deep valley in which the line of the present foreposts is drawn, and by the lofty tigeretzkoi snow-mountains; and bounded on the north by the river Tsharysh, whose course is accompanied by considerably high schist and chalk mountains; towards the west it loses itself in the north-western steppe. — The greatest elevation of these mountains is the Sinnaia-Sopka *, which is computed to ascend 2814 parisian feet above the level of the sea. At its middle and greatest height it consists of a mostly coarse granite, consisting of spatum campestre, quartz, and blackish micæ. On the north side it abuts extremely steep against the Bielo lake, under which appear leafy clay and table-schist which rest upon the foot of the blue mountain, and covers the granite between it and the tigeretskoi granatic snow-mountain, still thirty versts farther to the east. On the east side it in like manner struts boldly against the great Biela, and more to the west, in the angle formed by the little Biela with the great Biela. In

* The Blue mountain.

this angle, at the foot of the Blue mountain, is found schistus and chalk-stone, in which latter are some little cavities containing lapis calcareus stalactites. From the little Biela the mountains rise again towards the south, elevating themselves to the Revennaia Sopka, or Rhapontic summit, which is surrounded by the ore-mountains, and consisting of schistus corneus, mixed sparingly with mica spathosa and crumbs of mica campestris, in which latter are a few small hollows wherein are found stalactites. Towards the west, from the blue mountain, runs the granite-mountain range, in bulk from fifteen to thirty versts, interrupted by a multitude of valleys, proceeding an hundred versts to the Alay, and there unites with the alaiskoi granite hills. The northern foot of this granite-ridge runs under powerful schistus and chalk mountains, in and between which the two first kolhyvan mines were dug.

Another mighty ridge of granite runs from the Blue mountain northwards to the river Tsharysh, under-run on the western side by schistus and chalk, which again farther on extend to the yarofskoi and the tigeretzkoï snow-mountain. The component parts of all these granite-ridges, are various; one while the feldspar, another time the quartz, has the ascendant; now the component parts are coarse, and then so delicate, and so poor in micæ, that one might be induced to take the granite proceeding from them for sandstone.

This

This tract of mountains is uncommonly rich in silvery, copper, and zink ores; for in this tract lie the old and first Volkresenskoi, and Kolhyvaniskoi, Golovinskoi, Bogoyavlenskoi, Bobrovnikoffskoi, Kleopinskoi, Gustokashinskoi, Medvedeffskoi, Loktoffskoi, Berosoffskoi, Mursinskoi, Monastirskoi, and Tfhakyrskoi mines, of which, however, scarcely any are in work at present.

The KORBOLIKINSKOI mountain has its name from the brook Korbolikha, which runs through it. It is inclosed from the south, the east, and the west, by granite mountains; but on the north-east is bounded by the great Biela, accompanied by schist and chalk mountains. It consists, except in some few points which are covered with sea-bottom materials, for the most part of clay-schist, marlwake, lapis corneus, and quartz, which here and there are underlaid by granite and porphyry. Notwithstanding the height of these mountains, between the origin of the Korbolicha and the little Biela, is considerable, yet the mountain on the great Biela, such as the Revennaia-Sopka, and the Karaulnaia-Sopka remarkably distinguish themselves on account of their single summits. Its mineral consists of a schistose marlwake and hornschist, wherein here and there hornblend and crumbs of feldspar are to be met with.

The chain of mountains in conjunction with the north-western and south-eastern rivers of the Revennaia Sopka, the Blue mountain, and the Kolhyvan
granite

granite mountain; and in the south-east, after they have gone about the *kliutshetskoi majak*, terminate at the foot of high granitic snow-mountains. The *Revennaia Sopka* is the highest point of these mountains, being estimated at 2213 parisian feet higher than the *Shlangenberg*; it is said not to consist of granite, but of firm *hornschistus*. In this *torbolikinskoi tract* of mountains, the richest of all the Altay mine-works are carried on. For here is the crown of them, the *Slangenberg* (*Smeinogorskoi-Rudnik*); and besides that, the *Mashinskoi*, the *Marksheiderskoi*, the *Karamishefskoi*, the *Strishkofskoi*, the *Matveyefskoi*, the *Tsherepanoffskoi*, the *Kommissarskoi*, the *Goltzoffskoi*, the *Ivanoffskoi*, the *Piktofskoi*, the *Lazurskoi*, the *Haufenskoi*, and the *Semmenoffskoi* mines.

The ALAISKIAN mountains comprise that range which advances from the origin of the Alay to the two sides of this river, and between it and the Ouba and Irtysh, and runs out into the great saline plain, which is skirted by the Alay, the Irtysh, and the Oby. This range, as far as the stream *Shemanaika*, falling into the Ouba, and on the branch of the Alay *Talofka*, consists almost entirely of granite and porphyry, rises between the Oby and the Irtysh to a very considerable height, and seems to under-run the *korboli-kinskian* and *solotarashian* mountains, which, between the Irtysh and the Alay, is properly the fore mountain of the Alaiskian. Together with granite and porphyry here is found also mica and
clayschistus,

clay-schistus, marlwakes, and saline chalk-stone, on the right of the Alay, (where the granite ridge proceeds down to the lokteffkoi savode,) trapp and breccia, on the Shulba black schistus, chalk, and sandstone, and farther down gypsum, clay, marl, and beds of sand.

The highest summit of these mountains is mount Sludina in the district of the Alaïskoïsavode, which is calculated to be 1672 feet higher than the Shlangenberg. From this elevation we see the tigeretzkoi and buktarminskoi (or oubinskoi) snow-mountains, as plainly as though they were only a few versts off. The pinnacle of this mountain consists of a granite composed of feldspar, quartz, and black micæ, of pretty coarse grains. In the lower points the component parts are smaller, and instead of the micæ a bornblend takes the ascendant. In some places both are wanting, and the granite assumes a sandstone-like appearance. At its northern foot, four versts from the melting-houses, chalk-stone breaks with marine productions. — In this part of the Altay ore-mountains are the mines Medvedeffskoi, Plotkogorskoi, Shemanishinskoi, Shulbinskoi, Solotukinskoi, Lokteffskoi, &c.

The OUBINSKOI mountains, otherwise called the VOBROFSKOI, form, at the sources of the Ouba and Ulba, a considerable ridge, towering in lofty summits to high snow-mountains, sending out its branches on both sides of those rivers, especially between them, and at its foot is bordered by the Irtysh. The
greatest

greatest height of it rises near Bobrofskaia with porphyry, which in the north and south is frequently changed for granite, whose summits, one while with gentle, and then with bold ascents, surround the most delightful vales, abounding in odoriferous herbs of various kinds. — In the region about the fortress Oustkamenegorsk, the granite is under-run* by schistose earth, in antient times explored by the Tshudi, who took pleasure in mining. Higher up the Irtysh, as far as the Buk-torma, mountains of schistus frequently appear, in which copper ore is dug, and which here and there is under-run by porphyry and granite, but in many places are covered with chalk. The mountains in which the sources of the Ouba rise, consist of granite, porphyry, marlstone, petrosilex, and quartz. Towards the east the ouvinskoi snow-mountains raise their lofty summits, which, measured with the line, were found to be 5691 english feet above the water of the river Ouba which devolves its pleasant stream beneath its monstrous cliffs. In these mountains have been lately found the filipovskoi mines, on the Ulba, which promise great success; together with the mines talovskoi, nicolaevskoi, berezovskoi, ilinskoi, &c.

The BUKTARMINSKOI mountain begins in the superior region of the river Buktarma, at the frontier-heights between the chinese and the russian empires, declines from the south towards the north

* Untertentst.

and west, and accompanies the afore-mentioned stream, on both its sides, till its confluence with the Irtysh. It reaches to east and north-east as far as the mountains that run along the Kokufun, and towards the north up to those that follow the course of the Ulba. From the binskoi snow-mountains up to the head of the Uiman (which falls into the Kokofun) it forms a powerful ridge, rising almost throughout in high summits of snow, and on this side extends its greatest height to the source of the last-mentioned river. This huge mountain, as yet very little known, and partly inaccessible, consists, as far as we know of it, in its highest points of various kinds of granite, porphyry, and flint breccia. But in its chasms, and particularly towards the shores of the main or most considerable rivers, different sorts of schistus, chalk-stone, marl, breccia, and sandstone, are frequently met with. Jasper is found in abundance, with porphyry, and trapp, in the superior regions. Of the chalk-mountains seen in the lower confines of the Buktarma, some are very craggy and have a number of caverns. In these mountains there has hitherto been but one mine explored, the Buktormniskoi, with any hope of success.

The TELETZKOI mountain has its name from the lake Teletzkoe, (Teletzkoe ozero) on one of the greatest eminences of the Altay, and from which the river Oby issues. It forms, with its lofty summits, the boundary between Siberia and the Soongorey, strikes its powerful ridges down betwixt the lake

lake and the Katunia; and, after having turned round the east side and the lake, unites with the kusnetzkoï mountains. This division is one of the greatest, but at the same time the wildest and most inaccessible of all the altaian ore-mountains; hence it is, that its quality and contents are still but very little known. However, thus much we know, that very powerful granite and porphyry mountains are in its range, and that the earth near and upon it yields jasper, flint breccia, hornschistus, white, (probably saline) chalk-stone, coloured marble, blackschistus, marl, sand-stone, and in these there are iron, argentaceous copper, and lead ores, naphtha, asphaltus, &c. The mountains to the right of the Katunaia seem to be particularly rich in ores.

The TSHARISKOI mountains are of very great extent. They comprise the whole space between the highest sources of the Ulba, Ouba, and the Kokofun (till where the Tshuya falls into the Kokofun) and between the course of this latter river and the Katunaia, and carries its powerful forked ridges along both sides of the Tsharish, from its origin to its disemboguing into the Oby. Its direction is from east to west and north-west; and in the south it is parted, by a rude valley, from the oubinskoi snow-mountains. In several places it rises to a great height, heaving up enormous pinnacles, which in some parts are covered with never-failing snow, such as the Tigeretzkoï, the torgonskoï, the tshariskoï, the katunayaiskoï, the annuyiskoï, and the italitzkoï,

snow-mountains, which for the most part consist of granite, porphyry, jasper, and flint breccia. The Tigeretzkoï alone, to a considerable height, consist of marble, which contains a multitude of sea-shells. These in general are found to be 4392 parisian feet higher than the Shlangenberg. One of the highest points is the Kossipnaia-Sopka, (the ragged head,) consisting of monstrous blocks of hoary granite. In several places of these wild and extensive mountains, iron, copper, and lead ores have been dug up, but no regular works have been as yet set up.

The second half of the russian share of the Altaian mountains, namely, the kusnetzkoï range, is still, for the greatest part, almost unknown, and inaccessible. It may be reduced to two subdivisions, whereof one shall comprise the kusnetzkoï proper, and the other the krasnoyarskoï mountains, together filling the whole vast space between the Oby and the Yenisseï. These mountains throw up, on the Mrafs and between the sources of the Tom and the Yufs, some very considerable summits, many of them covered with eternal snow. In regard to its inward constitution and frame, we have as yet but few authentic accounts. However, from hence are brought various sorts of granite, porphyry, jasper, breccia, saline chalk-stone, marble with sea-shells, horn-stone, slate, serpentine, mountain-crystal, chalcedony, and carnelians. On the Kondoma, are productive iron-mines: in the region of the
origin

origin of the Tshumish the salahirskoi silver-mines continue to be worked with great expectations; and at Krasnoyarsk several copper-mines were formerly worked, but are now abandoned *. In the last mentioned circle is also an establishment for smelting iron-ore, belonging to the merchants Savelief.—The highest mountains here to be seen in the south are about the source of the Abakan, where the famous mount Sabin, or Shabina-Dabahn, raises his snowy head to a stupendous height, and

* In the district of Krasnoyarsk, to the left of the Yenissey, (says Mr. Pallas) the schistus is seen lying quite up to the steep soaring granite mountain, and is rich in ore; the chalk-mountain is but very narrow about the Tefs and the brook Koxa, and then follow northwards red sand schistus and marl stratum. Beyond the Yenissey we find the schistus-mountains much more northward still, as far as above the upper region of the brooks Sifine and Oubei, and the river Mana; and the chalk-cliff mountain runs as far as to the confluence of the Mana with the Yenissey, and therefore too near upon the town of Krasnoyarsk, where the Flœtze proceed. The chalk mountain here sends out a rib westward under the name of Arga, which presses westwards out of its direct course to the Yus, flowing much higher than the Yenissey, and its continuation the river Tshulym. From Krasnoyarsk north-west and eastward are pure Flœtze and level country, likewise the straight road thence to Irkutsk through nothing but low forests, which extend northward as far as the upper Tunguska, and where at most but small fletze ridges appear, so that in these parts the schistus-mountain must be much less powerful, as the granite yet extends in its former breadth and direction, and for example, on the river Ouda, as far as about the brooks Shelma, Nerek, and Sob, where are at present the best veins of muscovy glass.

the Ittem, on the borders of the brook Shantigyr.

The major part of the Altay mountains is more bald than woody. The largest forests are in the low countries about the Alay, the Oby, and the Yenissey. The species of wood are, the *pinus sylvestris*, the birch, the aspin, the *pinus picea*, the *pinus abies*, the alder, the willow, and noble larch-trees*, and cedars.—The principal rivers of these mountains are: the Irtysh and its collateral streams the Buktarma, the Ulba, and the Uba; the Oby, with its main rivers, the Alay, the Tsharysh, the Tshulym, the Tom, the Katunia, the Yus, and the Abakan, which falls into the Yenissey. The superior regions of the mountains are uncommonly exuberant in waters.

The Sayane mountains.

The nethermost snow-tops and granitic mainridges determine, at the Yenissey, and thence as far as the Baikal, the boundaries between Siberia and the Mongolée; so that only the northern side of the mountains belongs to Siberia. The granite-mountain stands here very bluff, especially in the region of the Oufs, which, to the right, falls into the Yenissey. The Yenissey itself rolls forth from between high snowy summits which hem it in with rocks, into a monstrous vale; as in general all the superior rivers flow in very high and dreary moun-

* *Pinus larix*.

tains. Behind the Oufs is a very lofty mountain, Khoin-Dabahn; and, more eastward, over the Ouba, a wide-extended with cragged rocky high-soaring summits, the mountain Irgentargak, which continues for above 500 versts, quite up to the sources of the Beikem and the Shifhkish. Hard by this mountain follows, to the north-west of the lake Kossogol, the frontier-mountain Nukutu-Dabahn, (or Khangai), whence the Karin falls into that lake; then, about the origin of the brook Khanga begins the mountain Gurban-Dabahn*, and reaches to beyond the sources of the river Ouro; where, at a mountain Kifimktu-Dabahn, begins the great chain Oudin-Dsoen, and, between the Vida and the rivulet Selenga, from north-west to south-east, forms the Siberian boundary. Another branch of lofty mountains proceeds under the name of Turon-Dabahn, between the sources of the Dshida and Tamnik, on one, and on the river Irkut on the other side, as far as to the Baikal.

The whole range (whose highest ridges, nearest to the Yenissey, are called, Sayanskoi-Krebet, but towards the origin of the Oka, Krebet Khandabaga) consists, more or less, of ragged granite and porphyry summits, which interchange with various kinds of schistus; and farther onwards, between the Yenissey and the Angara, is under-run with powerful floetzes of chalk, marl, clay, and sand.—

* The three mountains.

The granite in many of the hills, is so coarse-grained, that the best mines here are of muscovy-glass. In these mountains, about the Yenissey, are found numbers of what are called old tshudi mines; notwithstanding that their mineral contents are still almost entirely unknown; and except iron-ore, but little has been gained from them.

Though the range is here and there quite bald, yet, for the most part, at least in the vallies, it is forested. The species of trees are, the pinus sylvestris, the pinus abies, the pinus picea, the birch, and excellent larches and cedars.—The principal rivers of the sayane mountains are: the Yenissey, the Tuba, the Mana, the Kan, the Byrussa, the Ouda, the Oka, the Irkut, &c.

The mountains of the Baikal.

This range of mountains has nearly the same direction with the Baikal-sea, accompanying it on both sides from south to north and north-east, runs down to the west on the right of the Angara, where it flattens in a morassy steppe of prodigious extent; to the east it advances from the origin of the Lena, on both sides of that river, and here likewise dies away in a wide-extended floetz-ridge. In general it is a very craggy high-thrown mountain, partly consisting of granite, partly of flint-breccia and chalk-stone. In the inferior regions of the Angara and the Lena its floetz-mountain greatly declines, and frequently

frequently produces coal. From the upper angarian ridge, there runs, as it should seem, a branch westward, through the region between the podkammenaia and the nishnaia Tunguska, away over the Yenissey, and consists probably of mere floetz-mountains. About the north-eastern part of the Baikal, the upper Angara, the Mama and the river Vitim, where lie the famous pits of muscovy-glass, all the mountain is granitic *. The mineral contents of these mountains are as yet by far not thoroughly

* What Mr. Laxmann relates of these granite mountains deserves here to be quoted. " On the south side of the west end
 " of the Baikal, which is called Kultuk, a granite ridge extends
 " along that sea. The promontories, above fifty fathom high,
 " steep, eight hundred fathom long, and of far greater breadth,
 " consist entirely of milk-white quartz, which is seldom known
 " to form whole mountains (1). Then follows a fine-grained,
 " one while quartz-micaceous-spatous, and then only quartz-
 " micaceous, granite; and this composition of granite is pro-
 " gressively rest throughout in chinks, a curious circumstance
 " but rarely seen in old granite-mountains, and much doubted
 " of by some orographers. Some three hundred fathom from the
 " quartz excrecence several parallel gangues appear, which on
 " the eastern declivity, towards the brook Sludeinaia, extend
 " from west to east. The most powerful of them is about twelve
 " feet, the rest are smaller, and fall almost perpendicularly. The
 " mighty Salband, I might almost say, the prostrate, consists of
 " black scaly mica. To this succeeds a fine-grained, greenish,
 " brittle quartz, sprinkled with green micaceous crystals. It
 " comprehends one third of the whole, and terminates in a
 " solid feldspar, which fills the northern and larger portion of the

(1) In the Ural-mountains, however, several instances of it appear.

" gangue,

thoroughly known. The principal of what has been discovered in them, are coals, asphaltus, sulphur-sources, native sulphur, alum, common-salt-sources, lapis lazuli, muscovy-glass, carnelians,

“ gangue, in which frequently prismatic schœrl crystals are
 “ inclosed. The schœrl is green, transparent, or cloudy, of
 “ a quadrangular or pyramidal form, and some crystals are al-
 “ most five feet long, and fifteen inches in diameter; but these
 “ are cubically split; wherefore it is not possible to get them
 “ whole. Also micaceous crystals are frequently interspersed in
 “ the feldspar. Lastly, the feldspar lies on the quartz granite,
 “ in which but little spar and mica is interspersed. To con-
 “ clude, the gangue is visibly along the steep south-eastern side
 “ of the mountain quite to the water level of the Sludenaia,
 “ and in the holes sandy quartz, which the spring-floods have
 “ washed through a grot four fathom deep and two fathom
 “ high. The leafy greenish mica appears, as was remarked of
 “ the schœrl, in prismatic pyramidal crystals of from three to
 “ nine sides.—The learned are inclined to pronounce the whole
 “ region of the Baikal to be the effect of some great convulsion
 “ of nature; but in the range of mountains about the west end
 “ of this sea, which is called Kultuk, all seems to me to have
 “ arisen by a gentle and easy formation. The forementioned
 “ structure of the mountains shews how the minerals are depo-
 “ sited according to their quantities, and in conformity to the
 “ laws of relation. The crystals may perhaps have already receiv-
 “ ed their flats and points as they part dry and moist.” See Crell’s
 Chymical Ann. 1785, part iii. p. 265.—Of similar gangues
 in granite, various examples are seen in the mountains of Altai
 and Ural; especially in the latter the beautiful amethysts, at Mur-
 fink, are broke out of quartz gangues in granite.

natural prussian blue, and specimens of iron, copper, and lead *.

Some tracts of mountains about the Baikal, for example, the Burgundu and others, are so high,

* From a manuscript containing the mineralogical observations of M. Gruber, in the parts adjacent to the Baikal, I extract the following: "The country round Irkutsk, for some hundred
" versts on the Angara, and above a thousand versts on the
" Lena, is entirely of the floetz kind; but these streams have
" mostly high banks. In the confines of Irkutsk is a great deal of
" coal; and, near the city, on the bank of the Angara, in a
" subverted mountain, five veins of it, each a quarter of an arshine
" in thickness, at a distance of about two arshines above one
" another. — Salt-springs are here in many places. Not far from
" the Baikal magnesia vitriolata is prepared from the water of a
" lake; and eighty versts from Irkutsk, on the Angara are manufac-
" tories of common salt. From Irkutsk four hundred and thirty-
" four versts, on the Lena, extends a bed of copper-ore, which
" seems to reach, for nine hundred versts, to the river Kiren.
" The country, by the latter river, is far more hilly, and consist-
" ing partly of chalk-stone, whence several mineral sources
" proceed. Nor are specimens of copper wanting. Iron-ores
" and ferruginous stones are everywhere met with in abundance.
" On the Lena, here and there, are fallies of argentiferous glantz
" galena, interspersed in the chalk-stone, and at times appears in
" lumps of two or three pounds. It was first explored about
" fifty years ago by Messrs. Make and Kutuzof. They
" keep four machines at work at the said copper-floetz, near the
" villages Botova and Shemanova. The ores are green-copper,
" blue-copper, brown-copper, copper-glas, fahlertz-ores, and
" malachquite. The gangues are calcareous and sandy. The
" narrower the gangue, the richer it is. The proportion is one
" fourth to forty per cent. copper, but scarcely a trace of silver.
" On an average one hundred pood of ore yields four pood of
" good copper."

that

that they are covered with never-wasting snow. In that sea or lake itself many lofty and steep cliffs ascend above the waters as islands, some whereof consist of solid white quartz. — The mountains are partly bare, but for the most part decked with forests. The most usual kinds of trees are the *pinus sylvestris* and the birch; but here are likewise great numbers of larches and cedars. — The most considerable rivers which derive their streams hence, are the Selenga, the Angara, the Lena, the Vilui, and the Tungusa.

The Nertsbinskoi mountains.

These mountains, otherwise called the mountains of Daouria, extend from the Baikal and the sources of the Selenga and the Amoor, down the two sides of those rivers; on one side as far as where the Argoon falls into the Amoor, and on the other side up to the heads of the Niufa and the Oldekon, where it annexes itself to the spacious range of Okhotz, or Krebet Stanovoi. It consequently includes the whole space between the Selenga and the Argoon, take the same direction with the course of the Amoor and the Ingoda from west to northeast, and comes down to us from the Mongoley, under the name of Yablonoï-Krebet, or apple-mountain. It has its greatest elevations about the origin of the Amoor and the Ingoda, where it consists of very ragged granite tops, high and steep. Between the course of the Ingoda and the sources of
the

the Khilok and Vitim it is much smaller, notwithstanding which, it seems to stand very high. It here forms a ridge, pretty uniform in its progress, woody, and well watered, and consists for the most part of pure crumbled granite.

That part of this range inclosed by the Amoor and the Argoon, is properly called the Nertshinskoi chain of ore-mountains, (from the city of Nertshinsk, standing on the brook Nertsha, which falls into the Amoor,) is found to be the richest in minerals of any of the mountains hitherto explored in these regions. It produces beautiful kinds of granite, porphyry, jasper, a great quantity of chalcedonies, carnelians, onyx, agate, hornstone, large smoky topazes, aqua-marine, hyacinth, and topaz-coloured schœrl, genuine topaz and beryl, &c. granites, fine feldspar glandules, serpentine, asbestos, nephrites, chalk-stone, slate, gypsum, excellent river spar; salt-lakes, vitriol pyrites, alum-ore, native sulphur, coals, warm springs; zink, iron, copper, and a remarkable quantity of lead-ore, containing silver and gold, of which, since the commencement of this century, a great many mines have been opened, and whereof several are still in full work. These regions present very numerous forests. The trees are *pinus sylvestris*, larch, birch, firs, cedars, &c.—The principal rivers here are, the Selenga, the Khilok, the Vitim, the Olekma, the Karenga, the Niufa, the Oldekon, the Onon, the Ingoda, the Amoor, the Argoon, &c.

The

The mountains of Okhotsk.

This great chain, known under the name of Stanovoi-Krebet, borders upon the Nertshinskoi, or upon the Yablonoi-Krebet, near the region of the sources of the Aldan and Oldekon, runs thence on one side northward on the Lena down to Yakutsk, and on the other side westward to the oudinskoi gulf of the okhotskoi sea, which swarms with islands; proceeds round this to the upper Okhotsk, and strikes out several branches in the parts between the Lena and the Indighirka, between this and the Kolyma, and between this and the Anadyr, where a part of the mountain runs out upon the tshuskoi promontory, while the other continues its course into the peninsula of Kamtschatka.

All these extensive mountainous regions are almost entirely unknown*. From the district of Okhotsk
has

* To this partition range (1), says M. Pallas, between the sources of the Vitim and the Nertsha, that mountain-ridge which runs between the bargufinian territory and the Kilok, as also the Yeravna-lake, stretches across the source of the Vitim, of a great height, and much covered with forests, and is rich in all kinds of pyrites, possesses several warm baths, and runs away under the name of Stanovoi-Krebet, in an eastern direction, over the source of the Nertsha and the other streams of the Shilka or Amoor, parting these and all the waters of the Amoor from the brooks of the Olekma. It shoots out a strong ridge on the Olekma, which proceeds north-westward obliquely across the Lena above Yakutsk, abruptly turns with one part on the shores of the

(1) The Yablonoi-Krebet.

has been brought jasper, porphyry, and beautiful chalcedonies and carneoles, sulphur-pyrites, native alum, agaricus aluminaris, mountain crystal, coals, &c. and there likewise are warm springs.

The mountain is for the most part not very abundant in woods — Its principal rivers on the russian or northern side, are : the Amga, the Aldan, the Uda, the Maia, the Yana, the Indighirka, the Kolyma, and the Anadyr.

The mountains of Kamtschatka and the Eastern Islands.

The peninsula Kamtschatka consists of a rocky chain of mountains, which is bounded on the firm

eastern ocean, and proceeds with another branch over the sources of the rivers Uda, Aldan, Maia, and Yudoma, near upon the okhotskian sea, and disperses itself about the eastern entirely mountainous corner of Asia, in ribs that run between the principal rivers. In this eastern-most part of Siberia, the mountain is indeed extremely ragged and dreary, even the elevation of the country around is very considerable ; but the granite mountain seems there to decrease, and we know of no exceedingly high snow-summits, though the whole region is cold and rude, producing nothing but arctic and alpine plants even in the plains, and even in summer fast frozen marshes and vales, as in the arctic deserts, are no rarities there. About the Biela and Yudoma, in like manner as about the Urak, this mountain has again an inconceivable quantity of red and green jasper, of which whole chains are composed ; whereas on the whole side of the siberian mountains, this species of substance, except perhaps here and there on the south-side of the Yablonoi-Krebet, in Daouria, is no where to be perceived.

land

land by the penshinskian and anadyrskian gulfs, and by the river Anadyr. On the southern promontory the Kurilly islands are included in it, and towards the west it is connected with North America by the Aleutan islands. Either concerning the outward or inward mineralogical qualities of these insular mountains, we have but very little information *: we only know that there are some volcanoes in Kamtschatka. — The most considerable stream on this peninsula is the river Kamtschatka.

* Kamtschatka is a chain of mountains, contiguous to the eastern end of this main-ridge (1), forming one train with the whole suite with the very mountainous and rocky islands of Kurilly and Japan, which seem again to connect with the mountains which reach from Tybet through China. All these countries and islands seem to have arisen, by subterraneous fires which still continue to act, much more lately than Siberia. The eastern extremity of Asia, as we know from the opposite north-west territory of America, is hilly throughout, and the shores for the most part broken off. All the newly-discovered islands betwixt these two quarters of the world are fragments and summits of mountains, of which those lying nearest to Kamtschatka keep the bearing towards the south-east, while those off the coast of America proceed in the chain of the Fox-islands towards the north-east, and even in these directions have their oblong form. Between the eastern extremity of Tshutskoi-nofs, and the western point of North America, lie dispersed other little islands, under the name of Andreanofskie-ostrova, but concerning which we have no distinct accounts. Pallas.

(1) The Stanovoi-Krebet,

Of the principal Plains of Russia.

Great and numerous as the mountainous tracts of the russian empire are, yet the far greater part of it consists of plains and flats, whereof some are extraordinarily extensive. They are known here under the name of Steppes. I will briefly delineate the chief of them.

The Steppe of Petshora.

This plain is bounded on the north by the Frozen ocean and the White-sea; to the west by the Dvina; to the east by the Petshora; and to the south by the Floetz mountains, which, from the uralian chain stretch away westward across the government of Vologda. It therefore properly lies between and on both sides of these rivers. The ground is for the most part sandy, very marshy, thick strewn with forests, and almost entirely uninhabited; the districts about Archangel, Melen, &c. excepted. The trees consist principally in the *pinus sylvestris*, firs and birch, and on the elevations beautiful larches. This however is only to be understood of the southern part; in the northern, by reason of the extreme cold, wood succeeds but badly. On this level are a great number of fresh, but not very large lakes; and, besides the rivers already mentioned, many others are to be met with, especially if we

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consider as a continuation of this great level, that plain which extends westward through the governments of Novgorod, Petersburg, &c.

The Steppe of the Dniepr.

This comprehends the great plain which lies in the government of Ekatarinossaf, between the Dniepr and the Bogue; the krimean steppe on the left side of the Dniepr, and the whole space which extends over the Donetz, away to the Don, and the sea of Azof, and to the Euxine. This monstrous plain which takes in the greatest part of the governments of Ekatarinossaf, Taurida, and a part of Voronetch, Karkhof, and Kief, is in general of a very dry and sandy quality, with many salt-lakes and salt-plots, and is as yet but very little inhabited; here and there indeed is a wood with oaks and other forest-trees, but for the most part bare of timber, yet for the uses of pasturage and agriculture it is not only not unfit, but in many districts is perfectly well adapted to them.

The Steppe of the Don and Volga.

This comprises the whole space between the Don, the Volga, and the Kuban*. It is a very great,

* Within these confines lies what is called the Kuman-steppe, which comprehends the whole space from thence to where the Kuma flows out of the mountains, and reaches southward to the banks of the Terek and the Caspian sea: northward to the other

great, extremely arid steppe, entirely destitute of wood and water, has but few inhabitants, and contains several salt-lakes, and salt-plots†. It spreads through the greater part of the government of Caucasus and into those of Ekatarinoflav and Saratof, where, in its sandy and calcareous flœtz-mountains‡, it contains coals, sulphur-pyrites, and warm-baths.

The Steppe of the Volga and Ural.

This extensive plain comprehends, between the rivers Volga and Ural, all that flat country which

other side of the Sarpa, and eastward as far as the Volga. In this steppe lie the salt-lakes of Astrakhan, some bitter lakes, warm sources, &c. — The whole kumanian steppe, says Falk, has all the appearance of a dried-up sea. It is a sandy, part clayey and salt plain, without trees. But that it may have really been sea-bottom, is highly probable, from the flat shores of the Caspian and the sea of Azof, from the shallowness of their coasts, which is constantly gaining ground; from the equally low situation of the steppe, in which the Kuma, the Manitsk, &c. have scarcely any current, not to mention the general saltiness that prevails, and the salt-places; from the saline lakes, and from the quantity of sea-shells in the sand of the steppe to be seen in every part of it, and from several other circumstances.

† Solontshi.

‡ Veiny or mineral-mountains. Flœtz, among miners, is what does not run gangue-wise, but only horizontally in breadth, while above and beneath is solid stratum. In some places they are also called waving gangues: when a gangue dips under twenty degrees it is termed a flœtz and the main fall must be taken out by the carrier.

formerly went under the name of the Kalmyk-steppe; and, between the Ural and the Yemba, a part of the kirghiz-steppe lying within the russian borders *. To the south it makes the margin of the Caspian sea, and to the north it skirts the floetz-mountains that run out from the Ural-chain. This plain, for the most part sandy, is greatly deficient in fresh water and wood; but is therefore the richer in rock-salts, and a multitude of salt-lakes that are very productive. It contains a great number of districts well adapted to the purposes of agriculture and the breeding of cattle, but is very poorly inhabited. One part of it lies in the caucasian, and the other in the ufimskian government.

The Steppe of the Irtysh.

Under this name I mean that great plain which extends between the Tobol and the Irtysh, and

* It is termed the Kalmyk-steppe, because, it was left in possession of a horde of that nation, and by whom it was inhabited till their flight in 1771. The Kalmyks call it Gahsen, the desert. Its western part is denominated from the Volga, the southern from the Caspian, and the eastern from the Ural. It consists of a far-stretching ridge of sand-mountains, known under the name Rynpetki, but for the most part of a prodigious sandy plain. The aforesaid sand-ridge called by the Kalmyks, Narym, is said to be between fifty and a hundred and fifty vershs in breadth, according to admeasurements in several places, and extends from Obshtshei-Syrt, or the Ural-mountain, through the middle of the steppe, quite to the Caspian sea. The ground consists of sand, marl, and clay, frequently mixed with sea-shells, and everywhere bears the most evident marks of its having been formerly, as well as the kumane steppe, bottom of the sea.

between the latter the Alay and the Oby, as far as the influx of the Irtysh into the Oby, comprising an enormous territory. It is as it were over-strewn with lakes of several kinds of salts, interspersed among numerous forests of pines and firs and birch, in most places well calculated for pasturage and agriculture, but in proportion to their extent very thinly peopled. Between the Irtysh and the Oby this plain incloses also that fine well-watered level called the Barabinian-steppe, on which many considerable lakes are seen. The greatest part of this whole steppe lies in the government of Tobolsk, but the other part in that of Kolhyvan *.

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* Another part of this large plain, between the Ischim and the Irtysh, is called the ischim-steppe, which particularly abounds in bitter lakes, but in all other respects resembles the barabinian-steppe, and in which, as well as in the former, a great many antient tombs are met with. — The barabinian or barabinskoi steppe, and diminutively the Baraba, occupies the space between the Irtysh and the Oby, southward of the mountain, northward to the farther side of the Tara and beyond the river Tuy. This diffusive region, in length from north to south exceeding six hundred versts, and full four hundred in breadth from west to east, is all a flat, scarcely interrupted by a single hill, though containing many fresh-water lakes, with some of bitter, and a few of common salt. This plain is for the most part of a good black soil, having the face of it enlivened by a number of pleasant forests of birch. All serving to shew, says Mr. Falk, that the Baraba must have been one general bed of waters, and since far more morassy and replete with lakes than it is at present. Even in the memory of man, according to the affirmation of the

The Steppe of the Oby and Yenissey.

This includes the whole of that large tract beyond the Tshulim (which falls into the Oby) between the Oby and the Yenissey, and extends to the shores of the Frozen-ocean. The best forests, however, are only found in the proximity of the mountain towards the south. On the northernmost margin of the Frozen-ocean all the wood is low and stunted. The whole of this steppe lies in the government of Tobolsk.

The Steppe of the Yenissey and Lena.

This great tract of desert is bounded by the Yenissey, the Tunguska, and the Lena; reaching northward, like the former, to the Frozen-ocean, and partaking of the same nature and quality with it. One part lies in the government of Tobolsk, and the rest in that of Irkutsk.

The Steppe of the Lena and Indighirka.

The same account may serve for the region, little known, which lies a vast extended plain along the shores of the Frozen-ocean, between the Lena and the Kovyma, to the two sides of the Indighirka, and is wholly in the government of Irkutsk.

Barabinzes, the diminution of the lakes, and the exsiccation of the pools, reed-plots, and marshes, has been very observable, as well as the acquisitions thus made by the firm land,

SECTION IV

WATERS.

*Of the Seas forming the Boundaries of the Russian Empire.**I. The Frozen or the Northern ocean.*

THE Russians called this sea, in antient times, Morè Muremanskoe, but at present Ledovitoë morè. By the Goths it was termed Gandawyk, by the Cimbrians Mare Marusa, and by the Latins, Mare Sarmaticum, and Mare Scythicum. The Swedes call it Is-Hafoet, and the Norwegians Leberfee. It borders the whole of the northern part of the empire, from the confines of Lapland to the Tschukot-skoy-Nofs; that is, from 50 to 205 degrees of longitude, and consequently laves the shores of the governments of Archangel, Tobolsk, and Irkutsk. Several bays of very considerable expanse are formed by this vast ocean. The greatest is the bay in the vicinity of Archangel, which commonly goes under the name of the WHITE-SEA, extending from north to south within the land, from 69 to 63 degrees of north latitude, and contains a multitude of petty islands. — Next follows the Tcheskaia guba, the karian bay, called also the karian sea, Karstkoe morè; then the Obskoe bay, which is un-

commonly spacious ; the Taymurskaia guba, or bay ; the Khatangskaia guba ; two bays at the mouth of the Lena ; and, lastly, the Tshaunskaia guba, at 185 degrees longitude. — Of the numerous islands in this ocean the most considerable are ; Novaya Zemlia and Kalgueva ; but both of them are uninhabited, and only frequented by fishermen and hunters. Novaya Zemlia is indeed well supplied with waters, but is rocky, unfruitful, and destitute of wood ; scarcely are a few stunted bushes and polar plants to be met with there. But, on the other hand, this island abounds in rein-deer, white bears, white and blue foxes, and the shores swarm with morfes, walrusses, &c. Its magnitude is estimated at nine hundred and fifty versts in length, five hundred and twenty in breadth, and three thousand and ninety in circumference, without following the sinuosities ; and 425,509 german miles of superficies, according to Mr. Storch. On the northern side it is entirely encompassed with ice-mountains. Among the lakes there is one of salt water. From the middle of October till February the sun is not visible at all ; but they have numerous and strong north-lights. In summer there are no thunder-storms. The snow falls in many places to the depth of four arshines. For two months, namely June and July, the sun never sets. Between this island and the main land is the famous passage known by the name of Vaygar's straits. — Though this sea contains so many bays, not less numerous are
are

are the capes or points of land that strike out into it; these spits of land are called in rufs Muifs or Nofs; for ex. Muifs-Matfol, Severo-Sapadnoi-Muifs, Severo-Vostotschnoi-Muifs, (or Taymurskoi,) Muifs-Svetoi-Preobrajenia, Svetoi-Muifs, Shalatfskoi-Muifs, and Tfschukotskoy-Nofs. — In all this great sea there are only three harbours whence at this time any navigation is pursued, namely, Kola, Archangel, and Mefen, whereof that of Archangel is the most famous. But that navigation, in comparifon of the prodigious expanfe of this fea, is very trifling; however it is partly owing to the fhort portion of the year allowed by the ice for this purpofe; and in fome regions there is fcarcely time for undertaking it at all. As for the northern paffage to China, which, as every one knows, has been fo often attempted, nothing has hitherto been difcovered favourable to any hopes from future enterprifes. — The fhores in many places, efpecially thofe of the White-fea, are befet with rocks; in other parts low, with fhoals that, in a manner, forbid access, and the country adjacent is very marfhy. — The water in this fea is proportionably but little falt, though near Archangel it is fo briny, that fome quantities of common falt are prepared from it. The ebb and flow are moderate, and in the parts lying moft to the north fcarcely perceptible. — The fifhery is very confiderable, particularly of ftock-fifh, herrings, whales, morfes *, porpoifes, fea-dogs, &c.

* *Trichecus rofmarus*.

II. *The Eastern or the Pacific ocean.*

This ocean washes the shores of the government of Irkutsk, from Tschukotskoy-Nofs, or Cook's straits, to the frontiers of China, in other words, from the mouth of the river Aimakan, that is, from about 65 to 45 deg. n. lat. This ocean is divided into two great parts. That lying eastwards from Kamtschatka, between Siberia and America, is eminently styled the Eastern, or the Pacific ocean; that on the west side from Kamtschatka, between Siberia, the Chinese Mongolèy, and the Kurilly islands, is called the sea of Okhotsk. Thus, from the different places it touches, it bears different denominations: for instance, from the place where the river Anadyr falls into it, it is called the sea of Anadyr; about Kamtschatka, it is called the sea of Kamtschatka; and the bay between the districts of Okhotsk and Kamtschatka is called the sea of Okhotsk, the upper part of which is termed Penjinskoye morè, that is, the Penjinskian sea, as it approaches the mouth of the river Penjina.

In this ocean are a multitude of islands, and the peninsula of Kamtschatka; which, as in their proper place, I shall here enumerate.

1. The peninsula of KAMTSHATKA. It was first discovered by the Russians in 1696, but not made totally tributary till 1711. Kamtschatka lies between the 51st and 62d deg. of n. lat. and between the 173d and the 182d deg. of longitude. Its boundary

ary towards the east and south is formed by the Eastern ocean; towards the west by the sea of Okhotsk, and towards the north by the country of the Koriaki. — The country is full of mountains, among which are some volcanoes, whereof one is not far from Nishnei Kamtschatskoi ostrog, and another at a small distance from Verchnei Kamtschatskoi ostrog. The former is the biggest. In the year 1762, it first announced its approaching eruption, by a subterraneous noise, and soon after began to spout with flames on different sides. To this burst of fire immediately succeeded a large stream of melted snow, flowing down to the neighbouring valley with such rapidity that it carried away two Kamtschadales who were out in quest of game. The ashes and other substances thrown up were scattered round about to the distance of three hundred versts. In the year 1767 another eruption happened, but by no means so violent. On that evening streaks of fire were remarked to issue from the mountain. The irruption that happened immediately after caused considerable damage to the inhabitants. Since that time no flames have been observed to proceed from it; but both the mountains smoke continually. — Near the village Milkova a merchant of Irkutsk in 1760 discovered iron-ore, and erected smelting-houses on the spot. Silver-ore, though not very rich, is also said to have been found in Kamtschatka. Moreover, the country, in some places, bears birch-trees, poplars, alders, willows, shrubs, and wild fruits of various kinds;

kinds; white cabbage, turnips, small radishes, red and yellow turnips, cucumbers, &c. In the arts of agriculture the people have made no great progress; not that they have been wanting in attempts on their part, for even previous to the year 1765 several improvements were visible in their practice. The corn, from its early maturity, is almost always damaged. Perceiving that the inhabitants were not averse to the labours of husbandry, the late commandant of Kamtschatka, major von Behm, exerted himself greatly in bringing agriculture and grazing into repute, by encouragements of various kinds, and he had the satisfaction to see that his generous pains were not bestowed in vain. His worthy successor too, Mr. assessor Reinikin, continued these laudable endeavours, with such good effects, that in 1782, from 68 pood and a half of winter-rye, 3416 sheaves, and from 594 pood of barley, 24,840 sheaves, were reaped. Oats, wheat, and buck-wheat, are much spoiled in general by the early frosts; but hemp succeeds very well. With agriculture, the breed of european domestic animals has likewise been introduced; and even with potatoes a very successful beginning has been made.

2. BEHRING'S ISLAND. This island, which was discovered in 1740, lies in n. lat. from 55 to 56. It is a hundred and sixty-five versts in length and of various breadths; the greatest breadth however is twenty-three versts. This island consists of a range of bald cliffs and hills in continuity with each other, which, being only divided by a great number of vallies,

vallies, lying north and south, seem to rise from the sea like one single rock. The highest of these mountains, however, are, perpendicularly, not above a thousand fathoms in height, are covered with a yellow clay, and are very much riven by storms and weather. The vallies are extremely narrow. All the mountains consist of granite, except the rows that stand nearest the sea, which commonly are of sandstone, and, not unfrequently, form stony walls exceedingly steep. In these mountains there are likewise many caverns*. In the year 1741, three pretty smart shocks of earthquakes were perceived. The sea hereabouts is not covered with ice. The cold is in general moderate; notwithstanding which there are mountains whereon the snow never dissolves. Neither thunder nor the aurora borealis have ever been observed here. The island has springs of excellent water, and beautiful cataracts. Of animals there are only ice-foxes, seals, sea-bears, sea-lions, sea-cows, &c. No wood at all grows here; but several kinds of plants are seen. The island is uninhabited.

3. The COPPER ISLAND. This island, which was first visited in 1755, by Yakovlief, a master-smelter, lies east-south-east from the mouth of the river Kamtschatka, in 55 deg. n. lat. and extends from north-west to south-east, very narrow and long, to fifty-five versts in length. On the northern side its shores are for the most part bold and rocky,

* Hence it should appear that there may be chalk mountains.

inter-

interchangeably with considerable bays; but on the south side they are more gentle, and in part sandy. Only towards the south-east cape the coast is fronted by huge over-hanging rocks, and shoals which at ebb-tide form a level with the shore. The whole island is perfectly destitute of wood, and very mountainous. The mountains are very lofty, and consist of a brittle stony stratum, which frequently tumbles down in very large masses. In the north-western promontory native copper is found, (from which circumstance the island receives its name,) where, in a steep declivity of the mountain, two openings rise near the surface, scarce twenty fathoms asunder, and about as far from the point or promontory, which lead to a schistous gangart, mixed with quartz and friable spar, bearing a calcareous earth transfused with verdigris, from which native copper and copper-glass are got. Close to this, on the strand, left by the water at ebb, little bits of copper about the size of a bean, thrown up by the sea, are gathered. On the south side of the point of the mountain-reef, at the distance of some fathoms from the point, on a flat shore, were found three cliffs at various distances, partly below the high-water mark, whence more than half a hundred weight of native copper, in all kinds of bits, exfoliations, and masses, were obtained; and still a fourth place presented itself on that side, several fathoms from the point of land, right in the sea, where, in a space forty-six feet long and six feet broad, several

several little cliffs with native copper, and copper-glass exposed themselves to light. The largest piece of this native copper is to be seen in the cabinet of natural history in the imperial academy of sciences at St. Petersburg, weighing upwards of ten pounds.

4 The KURILSKOY islands. Under this name are comprised all those great and little islands which lie concatenated in the eastern ocean, from the foreland of the peninsula of Kamtschatka, or the kurilloy Lopatka, as it is called, between south and west, to the japan island Matmai; some whereof are inhabited and wooded, others quite bare and rocky, and a few that are volcanic. The sea-room occupied by them, taking it from the kurilaskaia Lopatka to the isle Matmai, may be estimated at thirteen hundred versts. Of the two Kurilly islands that lie nearest the Lopatka, the first accounts were brought to Russia in the year 1713. The others have been successively known from that period to 1779, by means of russian mariners, who, at the time, put them under contribution to the crown. At present, we reckon them to be in all one-and-twenty in number; namely, 1. SHOOMTSHU, the nearest to Kamtschatka. The channel between the Lopatka and this island is fifteen versts over. — The length of the island, from north-east to south-west, is fifty, and the breadth thirty versts. The land is low, with moderate ridges of hills. The eastern coasts, about the middle of the island, form steep shores and rocky shelves, and are for some way into the sea
studded

studded with rocks. Here is ore; and it is said that a vein of silver has been formerly worked. In the centre of the island is a lake, five versts in circuit, and flows by a streamlet into the sea. In this are caught fine salmon, and several other kinds of fish. There are no standard trees upon the island, only bushes of alder, willow, and an espalier kind of pine or siberian cedar, on which grow little cedar-nuts. The inhabitants are not genuine Kurils, but of kamtschadale descent; of these forty-four persons pay tribute. — 2. POROMUSHIR; between which and the former island the straight is but two versts broad. It lies from north-east to south-west, and is twice as large as Shoomtshu, very hilly, richly furnished with lakes and minerals, but destitute of wood. Here is no scarcity of red foxes, wolves, and all kinds of mice. — 3. SHIRINKI. The distance from Poromushir to this third island may be about twenty-six versts. On it rises a round mountain-top, and about it on the coast walls of rock and loose brittle stone, but no sandy bay, nor any safe inlet for shipping. The island is nearly as broad as it is long, and may be about forty versts in circumference. It is only inhabited by sea-lions and other marine animals, with some red foxes and sea fowl that have been carried thither with the ice. Except a few sticks of the mountain-pine and some alder bushes, there is no wood on the island; and as to water, there is neither a stream nor a spring. The rocks are very much disposed to break, and fall in fragments. —

4. MAKAN

4. MAKAN KUR ASSEY, lies at the distance of sixty versts from the foregoing; in length it is twenty versts, and in breadth ten. It is scattered with rocks, especially about the shores, and many meadow grounds, and moist plains. It has no standing wood, but such shrubs as in the last-mentioned island. Red foxes here are few; and sea-beavers and seals lie about the shores of this uninhabited island, which has neither lake nor stream, but plenty of springs on all sides. — 5. ANAKUTAN; the distance hither from the fourth island is thirty-five versts. It is about a hundred versts long and fifteen broad. Three summits of mountains here distinguish themselves by their elevation, two of which have exhausted craters. The wood is here likewise scrubbed and scanty. Red foxes are pretty numerous; but few sea-beavers, &c. on the coast. Several streams of hard water flow from it into the sea. — 6. AR-AMAKUTAN; the distance of this island is no more than six versts from the last-mentioned. It is in length twenty, and in breadth ten versts. In the centre of the island stands a rocky mountain, which was formerly a volcano; and towards the straight between it and the fifth island, on the eastern shore, stands another, which is also reported to have been once a burning mountain, the foot and summit whereof are covered with white sand. This island is also uninhabited, and is only visited by the Kurils on account of the chace, as it abounds with foxes; and on the shores are sea-lions

and sea-otters. In the steep declivity of the coast is found wasserbley, or molybdæna, in a white stratum. — 7. SYASKUTAN; from the sixth island hither it may be fifty versts; the current in the straight between them is very rapid. This island is also uninhabited. It is eighty versts long and five broad. Upon it are two high rocky mountains. One of them stands in the northern half, on the north-east shore, extends ridgewise, and has formerly burnt; round about are rocky hills and a coast of cliffs. The other huge rock is on the promontory near the north-west side, and, from the pinnacle to the sea shore, on both sides, consists of nothing but rock and crumbling stone. — 8. IKARMA; this is about twelve versts from the seventh island, and is eight versts long. Upon it is a volcano, which at times emits flames. The shore is in general stony, here and there presenting a sulphureous spring. Lakes and streams here are none; and, in regard to wood and animals, the description of the foregoing island may serve as well for this. — 9. TSHIRINKUTAN; to this from the eighth island is computed at thirty versts. The isle is round, and has fifteen versts in diameter. A mountain near upon the strand is continually issuing smoke, and very frequently lets large stones roll down one of its sides, whereby a valley has been excavated from top to bottom. The coast round about is mountainous and rocky. This island has great numbers of wild fowl, but in other respects is like the former. — 10. Mus-

— 10. MUSSYR ; from the ninth, this round and stony island lies at the distance of thirty-five versts, the diameter whereof cannot be more than three versts. It is destitute of water, but is notwithstanding frequented by great quantities of birds. Here are also sea-lions in abundance. — 11. RACH KOKE ; the distance from the tenth island to this is stated to be a hundred and twenty versts. The length and breadth of it may each amount to about twenty versts, and it looks like a solitary mountain pushing upwards from the sea. Formerly it had verdure upon it, with shelves of rock, where the sea-fowl made their nests in great numbers. But these rocky shelves have been demolished by the eruption of subterraneous fires, which split the summit of the mountain, throwing up vast quantities of stones and ashes, and since that time the island has always continued burning. At this eruption those places on the shores where formerly they had thirteen fathom water, were filled up with rubbish and ashes into shoals and banks. — 12. MUTOVA ; between this and the eleventh island the distance amounts to forty-five versts. It may be about thirty versts long, and nearly the same number in breadth. On the south side stands a very lofty mountain, from whose summit a thick black smoke is constantly rising, and which at times casts up red-hot stones, spreading danger and desolation around it. To the north, vallies rich in herbs and habitable plains extend, where various kinds of edible roots

and wild fruits grow as in the forementioned islands. Foxes are the only land-animals here. Persons subject to the tribute are here numbered at sixty-three. — 13. RASSAGU; this island lies forty versts distant from the twelfth, and is about thirty versts measured either way. It has lofty mountains and steep rocky shores, with very few sandy bays. On the mountains, here and there, is a good forest of birch, alders, and the nut-bearing pine; the vales and flats abound in herbs. On the land is no other animal than the fox, but the cliffs of the rocks afford nesting-places for all kinds of sea-birds, and the beavers and seals lie scattered on several parts of the strand. Here are no streams that yield fish. The Kurils on this island are not numerous, and part of them are baptised. — 14. USSASSYR, lies seventeen versts from it, and may be in length and breadth about twenty-five versts each. It is properly two islands lying close together, consisting of considerable rocks and cliffs. Opening to the south is a round bay, in the shape of a kettle encompassed with hills, where the strand is sandy; and along it, as well as on the sea-shore, runs a source of almost hot-water, and not far from it another. Here too are some spouts, running strong, and throwing the water to a considerable height in the air. In many places we perceive chaps and chasms in the earth of a hundred fathom in length, and sometimes more. Near the great spout the shore is steep and high, producing large lumps of sulphur and salmiak, which partly fall

fall down, and partly are collected there. Otherwise the island is in quality like the former. —

15. KETOI, lies thirty-six versts from the fourteenth island, and is thirty versts in length, with about ten in breadth. On this island are seen high mountains, with their white rocky walls and summits; at the foot of these and in the vallies are forests of birch, alders, the *forbus sylvestris aucuparia*, the *pinus cembra*, the *pinus montana*, and another species which is probably a *taxus*. The island nourishes, white, black-bellied, and red foxes. The sea animals do not lie in great plenty. The island is uninhabited. — 16. SEMUSSYR; here we may reckon thirty versts from the fifteenth island. The length of this is a hundred and thirty versts, and the breadth not more than ten. This island has four mountains, one of which shews evident traces of its having formerly burnt; else it is of the same properties with the last-mentioned. The passage hence to the seventeenth island is two hundred versts. — 17. TSHIRPO OI, with two adjacent islands; both in length and breadth it may be estimated at fifteen versts. This island has had a volcano, that has vomited stones over the whole face of it. In lieu of all forest-woods, nothing is here to be seen, except bushes of the above-mentioned *forbus sylvestris*, and no streams, but one little saline lake. In one spot is a salt-spring of that kind called *acidulæ*, the water whereof loses its acidity by boiling. On an adjacent island is also a volcano. — 18. URUP,

distant from the foregoing twenty-five versts. This island is of a more respectable size than most of the others, being two hundred versts long, and twenty broad. It has high mountains with bald heads, very steep, and about them deep glens. On the north coast lie four small isles almost contiguous. In the vales, and beside the streams, sometimes is seen a plain; and as well in the vallies as on the mountains, as likewise over the whole island on the north and east sides, grow good high forests of birches, alders, the *forbus sylvestris*, and sturdy willows. On the shores and in the valley-plains the herbs shoot uncommonly high. Streams of considerable size fall from the mountains into the sea, and yield a variety of fish. In the northern part, about the middle of the island, is an inland sea, which sends its waters, by a broad stream, into the ocean. The stream abounds in fish. There are great quantities of rats on this island, and red and white foxes in plenty. Where the mountains are broken into ruins, appear various clefts producing ore, such as copper-pyrites mixed with quartz, sulphur-pyrites as hard as steel, with quartz, and a poor copper-pyrites in a calcareous gangue. This island is only frequented for taking the foxes. — 19. ETORPU; it lies thirty versts from the foregoing, and is either way about three hundred versts. Lofty mountains with numerous summits are diffused over the whole island; one of them, at the northern extremity, emits a continual smoke from its top, and, at intervals,

vals, flames. The summits of the mountains are bald, with steep cliffs and heaps of rubbish. Here are strong forests consisting of the same trees with the last-mentioned island. In the southern half, near about the centre of the island, grow larch-trees, in the proximity of the sea, but slender, though farther inland, in the plains of the vallies, good timber trees, fit for the purposes of building. Here are likewise black bears, and in the forests sables and foxes are met with. Of rats there is no scarcity; fish-otters haunt the streams; the brooks abound in fish. During the storms that happen here, whales and large dolphins are thrown ashore by the sea. The sea-otter is not seen here, but sea-lions, though not of any great dimensions. The inhabitants are hairy Kurils, who dwell together in villages. They are numbered to the capitation tax at ninety-two persons. — 20. KUNASSYR; from the former island to this are about forty versts. It is a hundred and fifty versts long and fifty broad, and is entirely surrounded by mountains with lofty summits; but on the middle of the islands are low plains. Firs, larches, birch, &c. grow here. At the southern extremity, a flat sandy beach extends from the mountains, where the sea brings up a species of pearl-bearing mussel in vast abundance; some of the bigness of a dessert-plate. The island has lakes and broad streams that abound in fish. It is likewise inhabited by Kurils, who are rated at forty-one persons. — 21. TSHIKOTA; distant from the former island

island seventy versts. It is in length a hundred and twenty, and in breadth forty versts. It has lofty mountains, with similar forests to those of the twentieth, with lakes and streams of wholesome water. The inhabitants are also Kurils. At the southern extremity lie ten petty isles. — The two-and-twentieth is the island MATMAI, the largest of all, and the nearest to Japan. Its size and extent are not at present known. The channel between this island and Japan is said to be no more than sixty versts over, and full of rocks. The current here is extremely rapid. On the southern promontory stands the Japanese town Matmai, where the supreme commander has his residence. The hairy Kurils are in possession of the inland parts of the island. The Japanese and Chinese resort hither in trading vessels for the purposes of commerce, which consists of taking in barter of the Kurils, sea-otters, seals, and various sorts of furs, also fat, oil, and blubber of whales and other marine animals, eagles' feathers for fledging their darts and arrows, and other articles, which they get very cheap in exchange for silk and cotton pieces for garments, japanned vessels, rice, brandy, tobacco, sabres, knives, pots, and kettles, hatchets, and the like. In the regions of the bay Atkis, the land extends northward in a great headland, where lofty mountains rise in all parts, tending eastward in ridges. Within land are spacious vales between the mountains, and ample rivers roll in currents to the sea. The coast abounds
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in bays and bights, which might be made to serve as harbours. The forests consist of oaks, beech, elm, red-wood of an unknown species, birch, willows, and other trees never seen to grow in Russia. On the mountains are a large kind of nut in great abundance. The fields produce a multitude of unknown herbs and vegetables; yet among them are perceived strawberries, serviceberries, cranberries, bilberries, and a large kind of hips and haws. Of animals, the forests afford haunts to black bears, elks, roebucks, deer (which the Kurils hunt with clubs), fables, foxes, hares, and river-otters. The bays and inland lakes swarm with all kinds of ducks and other water-fowl; nor is the country deficient in frogs and snakes.—Of these two-and-twenty kurilli islands, only the former twenty-one are subject to Russia; but all of these do not pay tribute.

5. The ALEUTSKY islands. Under this general appellation are comprehended that chain of islands which extends from Kamtschatka, beyond the Copper-island, north-eastward to the continent of America, whereof the most considerable amount to forty in number. We may clearly admit this chain of islands to be a branch of the kamtschadale mountains continued in the sea. A part of it was first seen soon after the discovery of Behring's island, the rest at several periods since. South eastward of the Copper-island within a hundred and fifty or two hundred versts between the 54th and 55th deg. of n. lat. lie three small islands known by the names
of

of Attak, Shemya, and Semitshi, and, with a few others, were first denominated by the Russians Aleutskie ostrova, because a bald rock, in the language of these parts, is called aleut. In the sequel this name was extended to the whole chain; though a part of it, namely as far as the island Yamblak, are named the Andreanofskoi, and the rest, lying farther towards America, the Fox islands.—Of the above-mentioned three little islands, Attak is the biggest, seems to have a larger extent of surface than Behring's island, and has an oblong form, lying more west and east. No volcanic traces have been discovered, and here are no land animals but ice-foxes and rock-foxes, more frequently blue than white. The sea-otters come hither but singly; whereas sea-lions, sea-bears, manatis, and some other sea-animals frequent these shores in herds.—That row of islands comprehended under the name of Andreanofskiye ostrova, runs south-eastward from the extremest of those properly called the Aleutan islands, continuing the chain as far as the Fox islands, between east by north and east-north-east, within the 52d and 54th degree of n. lat. The southern and nearest are inconsiderable islands, and but little known. More remarkable are: Takavangha, which has in its centre, near the northern coast, a burning mountain; Kanaghi, likewise with a high smoking mountain; Ayag, which has a number of good bays and anchoring places; and Tshetchina, on which a high white mountain over-tops
the

the rest, which apparently is an extinct volcano, as there are still hot springs on this island.—The late Mr. Muller arranged the islands between Kamtschatka and America, in the following manner: Under the general name *Safignes* are six islands, viz. *Behring's* and *Copper* islands, and the nearest *Aleutans*, whereof *Otma*, *Samia*, and *Anatto*, are most eminent. The second division is called *Chao*, and comprehends eight islands; *Immæk*, *Kiska*, *Tshetghina*, *Ava*, *Chavia*, *Tshagulak*, *Ulagabma*, and *Amtshigda*, or the more distant *Aleutans*. The third class bears the name of *Negho*, and contains what are called the *Andreanofskiye* islands, that is the sixteen following: *Amatkineg*, *Ulek*, *Unalga*, *Navotsha*, *Uliga*, *Anægin*, *Chagulak*, *Illashe*, *Takavanga*, *Kanaga*, (which two are remarkable for burning mountains,) *Lek*, *Shetshuna*, *Tagaluhn*, behind which follow some uninhabited little rocks and islands, one of which, on account of its black cliffs, is called by the Russians, *Goreloi* *, and, lastly, *Atshak* and *Amalak*. The fourth class are the *Fox* islands, under the name *Kavalang*, the number whereof is said to be sixteen, as: *Amukta*, *Tshigama*, *Tshegula*, *Uniska*, *Uliga*, *Tanagulæna*, *Kagamin*, *Kigalga*, *Shelmaga*, *Unmak*, *Agun-Alæska* †, *Unimga*, or *Unimak*, towards which a point of land from the continent of America, with a few circumjacent

* The burnt.

† Or, *Unalashka*.

islands,

islands, is said to project; and then, still beyond this point, are Uligan, Antun-Duffume, Semedit, and Senegak, whence perhaps Kadiak was formed. The Andreanofskiye and Fox islands are in general just as mountainous as the Aleutan and Behring's island. Their coasts are rocky and surrounded by breakers. The land rises immediately from the coasts, to steep, bald, rock-mountains, gradually ascending higher behind each other, and take the appearance of chains of mountains, with a direction lengthwise of the island, and commonly in the midway of the breadth the highest ridges are formed. Springs take their rise at the foot of the mountain, and flow either in broad and rapid streams, into the neighbouring sea; or, collecting themselves in the rocky vales and glens, beneath, form ample lakes, which let off their superfluous waters by natural canals, into the adjacent bays. Several of these islands, where at present no smoking volcano is any longer discernible, as Ayak and Tshetchina, seem antiently to have had them, as their traces are still to be seen in the sulphureous boiling sources that are met with at various intervals. On Tatavanga and Kanaga, among the Andreanofskiye islands, and again on Umnak, on the great island Unalashka, and on Unimga, among the Fox islands, are still active volcanoes, which continually emit smoke, and from some of them frequently issue flames. Only the smoking-mountain of Unalashka has never been seen to vomit fire. Any traces of metals

metals have never yet been descried on these volcanic islands. But carneoles and sardonyxes are brought from them. The soil of these islands is reported to be similar to that of Kamtschatka ; the same kinds of edible wild berries and roots have been found there, excepting some few vegetables which seem to be of foreign produce. Besides creeping twigs of willow, larches, alders, and birch, which seem as little as on the snow-mountains, no wood has been perceived on these islands, Kadiak excepted. It is said, however, that on Unalashka, in some deep vales, a small matter of wood shoots up. But the sea wafts all sorts of floating-timber to their shores. Of land-animals, on the Fox islands (though not on the Andreanofskiye) they have an extraordinary number of foxes. Among which there are about as many black and grey, as red and brown. Here are also bears, wolves, river-otters, river-beavers, martins, and ermines, which are however in inferior quantity, and seem to be come over from America. The sea-otter is frequently caught here. Their seas abound in all sorts of seals, dolphins, and whales ; sea-lions and porpoises are rare, and sea-cows not at all to be seen. The water-fowl, and fish are the same as at Kamtschatka. The winter is tolerably mild, but the summer equally short and unpleasant. These islands are pretty well peopled ; the inhabitants mostly pay tribute to Russia, and drive a bartering trade with the russian mariners who go thither on account of the very profitable

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chace

chace of sea-otters and foxes. They are, however, not always to be trusted, as no small number of Russians have experienced to their cost, having been robbed and murdered by these savages. — Of the inhabitants of Unalashka, their clothing, food, &c. an account is given in the voyages of Capt. Cook.

The most noted harbours in these seas are that of Peter and Paul, (or Avatsha,) on Kamtschatka, and the port of Okhotsk. In the former english vessels have at various times landed; and from both several russian ships, for the purposes of the chace and the taking of sea-animals, to the islands in the ocean. Ebbs and floods, and particularly the currents, are very strong. The sea-water is uncommonly salt. But this prodigious ocean is in general by far too little known at present for a particular description of it.

Kamtschatka (says Mr. Kirwan, in his ingenious estimate of the temperature of different latitudes) is so distant from the Atlantic, that its temperature is no way influenced by it, but rather by that of the north Pacific to which it adjoins. On the eastern coast, latitude 55, Captain Cook found snow six or eight feet deep in May, and it continued till June; in May the thermometer was mostly at 32° , and on the 15th of June not higher than 58° ; in August its greatest height was 65° , and its lowest 40° ; in October the hills began to be covered with snow; in November, December, and January, there are violent

violent storms, accompanied with snow, the wind at E. and S. E. In January the cold is sometimes 28° , but generally 18° .

The northern parts of this peninsula enjoy the most moderate weather, being chiefly influenced by the north sea, whose temperature, I believe even in winter, is milder than that of the sea below the straits that separate Asia from America.

Speaking of the temperature of the north Pacific ocean, the same judicious and accurate author observes, that this part of it is contracted in latitude 66° to the narrow space of forty miles; and in latitude 52° it occupies the space of only 30° in breadth, from east to west, that is, about thirteen hundred miles; whereas the Atlantic in latitude 52° is about seventeen hundred miles in breadth, and is nowhere contracted to a less space than seven hundred miles. Add to this, that the coasts of Asia on the one side, and those of America on the other, are bordered with high mountains covered with snow for a great part of the year; and numerous high islands lie scattered between both continents. From these circumstances we have sufficient reason to conclude a priori, that this sea should be much colder than that portion of the Atlantic contained between the same parallels; for, during the winter, the mountains that line the coasts, are cooled to a much greater degree, than the flat coasts of the Atlantic; and the sea, where narrow, is entirely frozen; in summer, heaps of ice, being

being long sheltered from the sun by the islands, are carried down into lower latitudes, and the snow remains long unmelted on the mountains; so that he is inclined to think, that the annual temperature of it is at least 4 degrees below that of the standard in each corresponding latitude. But the observations either on these seas, or the neighbouring coasts, are not as yet sufficiently numerous, to determine, with any precision, the mean temperature of any of these parts.

III. *The Euxine or Black-sea.*

This laves the shores of Taurida and a part of the governments of Caucasus and Ekatarinoslaf. It is divided into the Euxine proper, the Pontus Euxinus, computed to be a thousand versts in length, and five hundred in breadth; and the sea of Azof, the Palus Meotides of the antients, which (not including the bay of Taganrok) is stated to be two hundred versts long and one hundred and sixty versts broad. Both these are now entirely within the confines of the russian empire. The most important of the bays they form, are: 1. The Liman at the mouth of the Dniepr. 2. The bay near Perekop; and 3. that close to Yenicaly. These seas have but few islands in the vicinity of the russian coasts; the most considerable of them is Taman. — The principal harbours here are: Kaffa*, Sebastopol, Koslof,

* Now Theodosia.

Balaklava, and some others. At the western extremity of these seas, within the province of Taurida, is a very large pool, called Sivash, or the Putrid sea, which is about one hundred and forty versts long and fourteen broad.

IV. *The Baltic or East-sea.*

This sea, anciently called Variatzkoie morè, or the sea of the Varagians, lies westward of Russia *. That part of it which washes the coasts of the governments of St. Petersburg, Reval and Vyborg is called the Gulf of Finland, which is above four hundred versts long, and from a hundred to a hundred and twenty broad : the part extending between the government of Riga and the island *Æsel*, is called the Bay of Riga. The chief harbours in this sea are : 1. Riga (or Dunamunde). 2. Reval. 3. Pernau. 4. Habsal. 5. Rogervyk, now called Baltic port. 6. Petersburg (or Cronstadt). 7. Vyborg. 8. Frederickshamm, and 9. Arensburg, on the isle of *Æsel*. The principal islands in this sea, belonging to Russia, are : Dago, *Æsel*, Cronstadt, Hochland, Tytersaari, Lavanfaari, Penisaari, and Seitsaari. There are great fisheries in these parts, and numbers of seals are taken ; but far more

* Ptolomy calls this sea Venedicus finus ; Tacitus, Mare Suevicum ; and Pliny speaks of it under the name of Codanus finus. The Russians call it Baltiskoe morè ; and the Swedes, *Ofter-Sjon*.

considerable is the navigation : as it may be computed that every year upwards of two thousand ships of burden pass to and from the russian ports alone. Much skill and caution are requisite for navigating this sea, and especially the gulf of Finland, both on account of the heavy gales of wind so frequent here, and the multitude of rocks and shelves with which these seas abound. The water is but moderately salt, and has a very perceptible current, so that in northernly winds it is almost fresh to the taste. It is affirmed, on very good foundation, that the water of the Baltic is continually decreasing*.

I shall conclude this head with a short description of the above-mentioned islands, and a somewhat more circumstantial account of Cronstadt, which, as it is properly the port of St. Petersburg, and the centre of its foreign commerce, seems to demand particular notice.

DAGO or DAGEN, and ÆSEL are two considerable but rocky islands. On the latter are nevertheless many beautiful flowers. Considerable quantities of limestone and marble are brought away from it†.

ÆSEL, commonly called in esthnic, Kurrehaar, i. e. Crane island, but by the inhabitants Sare ma, i. e. The island. A literary gentleman of the place

* According to repeated observations made in Sweden, the Baltic is found to subside at the rate of forty-five inches every hundred years.

† See Hup. i. 315. iii. 407. Haigold, ii. 363.

supposes the former name may primarily have been used to express the Kures island: for, as the Kures, especially those on the coast, by the testimony of history, frequently made common cause with the *Æselans*, the Livonians on the main land might answer the interrogatories of the Germans on their arrival: *Æsel* is the island of the Kures, *Kurè* or *Kurasaar*; whence afterwards *Kurreasaar* might probably arise. The Lettish called this island *Sahmu femme*; on which a sagacious critic remarked, that this name likewise may have undergone a gradual change, and at first was *Sahna femme*, i. e. Side-land. — The length of the island from *Palmerort* to the point lying to the south-east of the light-house of *Svarverort*, is about eleven and a half swedish miles, nearly a hundred and eighteen versts. In breadth it varies greatly: its largest being nine miles and a half, or ninety-nine versts; its smallest at the isthmus to the north-east of the creek of *Kylla*, is about a quarter of a german mile, or two versts and a half.

The temperature of the air is moderate and salubrious; the soil being in most parts sand, loam, and clay, is therefore poor; but after good manuring with cow-dung or sea-weed, and proper culture, it produces good corn, particularly wheat, rye, and barley; in favourable seasons likewise oats and peas; only the quite sandy parts seldom yield good barley, especially in dry summers, as it then all runs to straw.

The stone-quarries here are fine and very productive. A statuary from Petersburg came hither in 1778, and dug out large blocks of limestone four or five yards long, of which he made the statues for the new imperial armory at St. Petersburg, and since that time great quantities of blocks and slabs for table-monuments, &c. have been sent to that place. The academy has likewise obtained various kinds of beautiful and rare stones from *Æsel*. The marble lately discovered is veined of blue, red, and yellow, but is not found in large pieces; besides, it appears to be not of sufficient maturity. Black and grey flagstone are found here; likewise red-besprinkled grindstone in large masses, which, there being no other demand for them, are broke to pieces by the boors.

The character of the *Æsel* peasantry much resembles that of their brethren the Esthonians, only that the former are more cleanly and orderly, are in general not given to drinking, and such as exceed a little in that particular, prefer beer to brandy. In music and dancing, those of *Æsel* shew more taste than the inhabitants of the adjacent continent: we occasionally meet with boors who produce very tolerable airs from their favourite instrument the bagpipes; they have likewise two sorts of dances; one called by them the *suur* or *køerge tants*, i. e. the great or high dance, and another named *pissuke tants*, the little dance. Their houses are more commodious and more adapted to health than

than those of the Esthonians; they have windows and some begin to have chimnies. In a few of the rooms are deal-floors: several of the wealthier sort no longer burn laths for light, but use tallow candles, and the opulent boors along the coast have iron lamps with sea-dog oil: however these elegancies are very rare, the generality live in much humbler style.

For the Esthonians and the Lettish an almanac is annually printed in their own language, and sold at an easy price: but the boors of Œsel make themselves their kalendar; for which purpose, as they cannot write, they have made choice of certain signs, which they mark in an artless manner on seven narrow flat sticks tied together by a thong, or more properly on thirteen sides. On each side is a month consisting of twenty-eight days. By this kalendar they know at once every week-day, every immoveable festival, and every day that is memorable among them by any superstitious rites; for each has its peculiar sign. They begin to reckon every successive year one day later than the last; and in the use of the kalendar they follow the practice of the Hebrews, and other oriental nations, who begin their books at what with us is the end, and read from right to left.

MOHN, called by the Esthonians Muho ma, which literally signifies, the land of boils or sores. The strait, called the great sound, which separates it from the main land is about two swedish miles over in its

broadest part, and near a mile where it is narrowest; the transport being made in summer by large boats, called prames. The like pass between Mohn and *Æsel* across the little sound, which somewhat resembles a spacious haven. Various reasons have been alleged for supposing that it gradually arose and separated the two islands. Henry the Lettonian describes the track to *Æsel* with great accuracy; he relates the difficulties of the voyage; but says not a word of the little sound, in mentioning the division of the province to which Mohn belongs. Mohn lies to the south-west of *Æsel*, forming a parish of itself, with its own church and preacher. Ships in passing the great sound take boors as pilots on board, to whom they pay five rubles. Near the middle of the island on an eminence stands the church. Many of the boors live comfortably; almost every one of them having his own little portion of forest, which they keep neat and clean on account of the scarcity of fuel, and which as well as their hay-fields are inclosed by a sort of wall of stones laid one on another. As a shelter from the storms to which these seas are subject, some have built their houses in the midst of these little thickets, carefully gathering up the dry twigs that fall off in the autumn to save firewood. By this prudent diligence their woods have a very elegant appearance; but on the coasts nothing is to be seen but hay-fields and rocks. Not only acorns and bilberries, but also wild nuts and crab-apples grow here, of which last the boors make a tolerably

tolerably well-tasted cyder ; in the farms they also use them for swine-mast. By collecting the stones for inclosures, the inhabitants have cleared their fields of them and gained considerable spots of land. The circumference of the whole island amounts to ninety-five versts. The passage over the great sound in summer with oars is made in about four hours, but with a sail and a fair wind, in less than two.

To Mohn belong two small islands ; one lying towards the north, and quite uninhabited, is merely a hay-field for the boors of Mohn ; the other lies nearly between Œsel and Mohn, in the little sound, and here live three boors. For some years past Œsel as well as Mohn have been visited with the distemper of the horned cattle, but not raging with so much violence as on the terra firma. — Here is a large stagnant lake, from which a canal has been made to the sea. The whole space is full of shilf so as to look like a wood ; but it is cut down and turned to profit. The proprietors of estates have erected two sluices that the canal may be shut in, by which an uncommonly productive fishery has arisen here of the fish that come up the canal in the spring after the fresh water.

RUUN, for so it is here pronounced ; Runo, Rune-holm, as it is usually called, come from the Swedish. In an extensive sense it belongs to the province of Œsel. This island lies in the middle of the gulf of Riga, at the distance of ninety-five versts from the town of that name, and rather more than fifty-

one versts from Œsel. It is distinguishable far off at sea by a forest of birch trees, which occupies one of its sides. It is entirely the property of the crown, and is inhabited solely by swedish boors. Here is a church and a preacher; who, if we may judge from the smallness of his congregation, must be of a contented disposition, and exercised in patience; though his income is very decent, having the tithe of all the products of the island, and a parcel of land beside. Vessels rarely pass between this and Riga; but the people take little concern about the transactions of the firm land. In behoof of the ships here is a light-house, for the supply of which the boors are obliged to buy the fuel on the continent, for which the crown allows them forty dollars. There is no farm on the island, except that of the pastorate. The arendator collects the stated imposts merely from the boors, which amount to no great matter. For settling the differences that arise among the boors, the pastor, with a convocation of the elders, decides in the first instance; the discontented have an appeal from this decision to the arendator. It is affirmed, that, among the inhabitants are found some remains of the old Livonians: they speak the runic language, which is entirely confined to them, and perhaps is the true livonian; also the esthnic, the lettish, the swedish, but most commonly the german and rufs, each with facility from their frequent intercourse with others. In the labours of the chace and the capture of the sea-dog, they are indefa-

indefatigable, whereby they gain an opulent subsistence. They live in great harmony, and only intermarry among their own society*.

DAGO lies nearly in the 59th degree of north latitude, exactly opposite to Æsel, from which it is separated by a small strait. It is distant from the main-land upwards of eighteen, and in some places above thirty miles. This island is at least about eight swedish miles in length, from east to west, by near six and a quarter of breadth. It is of an oblong shape, having a promontory extending westward far into the sea; a smaller one to the northeast, another to the south, and a fourth almost due east. The others are less considerable. The two principal sides, which are equal, are about six miles in length, but along the shore, on account of its sinuities, at least seven miles. The larger of the two smallest sides, which is that to the north, measures about five and a half miles in a strait line, and the fourth side about three and a half.

The passage from the main land to Dago is usually either across the island Vorms; or passing by the little isle of Hestholm southward or northward. Many direct their course by the village Vachterbæ, where a forest of alders, seen at a great distance, serves for a land-mark; hence it is forbidden, under very heavy penalties, to cut down a tree of this

* These accounts are communicated by pastor Haken, at Yamma, who is very advantageously known to the people of these parts.

forest. In summer-time the passage is very safe across the sound in a little boat with three boors; though by reason of some unavoidable circuitous routes, the passage is reckoned at from thirty to thirty-five versts, and even more. There is doubtless great danger from sudden squalls of wind; but misfortunes are not often heard of, as the parts being well known to the inhabitants, they easily run into some bite of one of the petty isles. It frequently happens that a passenger is long detained by contrary winds, and, not being accustomed to take much provisions for so short a voyage, does penance for this neglect by suffering extreme hunger.

The numerous shallows, sand-banks, and small islands, render the navigation about Dago somewhat perilous; and ships are often stranded here. On the western promontory, whose extreme point is known to mariners by the name of Dagerort, a light-house is maintained for their benefit. It stands about three miles from the sea, on a mountain computed to be twenty-two fathoms in perpendicular height.

No pestilential disease was ever known to make any ravages here; and the population is so great, that the estates are almost burdened by the superfluity of people. Accordingly in summer many of them go to the main-land and gain a livelihood by ditching, bricklaying, plastering, &c. where likewise whole families are often sold. The land is not sufficient

cient to their support, and the landlords would derive no profit from their estates if they were obliged to maintain their vassals. As they cannot all live by agriculture, many turn their hands to various arts and handicrafts, in which, by their uncommon ingenuity, they succeed so well as sufficiently to confute the prejudice concerning the stupidity of the Esthonians. We find among them numbers of expert workmen in gold and silver, turners, clockmakers, locksmiths, carpenters, joiners, and even ship-builders. The majority of the country-people are Esthonians; yet here are many, even whole villages of swedish boors: all of these however have not equal privileges with the former. The island is deficient neither in forests nor in stone. On the western part is much sand; but the southern and eastern parts consist of a blueish clay, and therefore a fertile soil. Accordingly a considerable quantity of good corn is produced; only the seed requires to be sown somewhat early. Barley thrives well in rainy seasons. The counts de la Gardie were the principal proprietors in the island, and four capital estates now belong to one of their descendants, the countess Steinbock. The sand-banks that lie about Dago, at low-water resemble islands; but in long westernly winds are overflowed. Near the Puhalep church are the ruins of an antient castle, which the boors call Vallipea, denoting a fortress, and which they pretend to take its date even from the heathenish

thenish times. Perhaps it is only the fort Gurgensburg, built by the Swedes in the sixteenth century.

VORMS*, to which the common charts unaccountably give the name of Ormson. It is in length fourteen versts; in breadth rather more than nine versts, and the shape of it nearly quadrangular.

NUK, or Nukoe. This island at times becomes a peninsula; being joined to the main land: but, when the water is high, and the wind blows from the sea, the flood runs so between, that it is entirely cut off from the land, though at times it is possible to walk dry-shod from either to the other. Nuk is about fourteen versts long and eight broad.

KASSAR, to the southward of Dago, with a chapel, is about eleven versts long and between four and seven versts broad.

ODENSHOLM, lying to the north of Nuk, likewise with a chapel.

HESTHOLM, that is, Horse-isle, to the south of Vorms, uninhabited, and only visited for taking its crop of hay.

The other little islands, which are frequented only for the last-mentioned purpose, and that of the fishery, need no farther notice; some of them are merely rocks or sand-banks.

NARGON, is twelve versts from Reval, nearly ten versts in length, and four in breadth.

* In esthnic it is called Vormsisaari.

HOCHLAND, or Highland, is an oblong rock, two to two and a half versts in breadth, and eleven in length, shooting up almost in the middle of the gulf of Finland, being distant from St. Petersburg a hundred and sixty-five versts, from Vyborg a hundred and thirteen, from the shore of Esthonia sixty-two, and from the coast of Finland forty-five. The channel about this island is from twelve to thirty-six fathom, and still nearer the land of sufficient depth; so that ships of the largest construction may sail round it. Two light-houses are kept here by the crown. Hochland may be said to be one mass of stone; not only because it mostly consists of rocks, but also because one rock adheres to the other. These pieces of rock are almost innumerable, and of various dimensions; five of them however are remarkable for their height. In the heart of the isle is a deep and gloomy vale, not above one hundred fathoms wide, in which are still to be seen some remains of a very antient bridge. The island has likewise a great deal of swampy ground; it is not, however, destitute of wood, such as pines, firs, birch, alder, &c. On the highest rocks are three little lakes, not without fish; neither is there any deficiency of fresh springs. The inhabitants are Finns, amounting to about thirty families. It cannot be expected that the arts of agriculture are much practised here; however there are some meadow lands. Of domestic animals here are only a few black cattle and a little flock or two of sheep. Of wild

wild fowl, they have woodcocks, ducks, eagles, hawks, crows, mews, sparrows, yellow-hammers, chaffinches, &c. magpies are not to be seen, though they abound on all the continent of these parts. Seals are caught in great abundance; and dolphins are often taken. Of the kinds of fish, herrings * are in the greatest plenty. Lead-ore is said to have been found here.

TYTERSAARI is a round island, pretty high, but not above ten versts in circuit. It lies eighteen versts to the south-east of Hochland. As appendages, on the western side, or in the sound between it and Hochland, it has four small isles, quite low, but pretty far asunder: Kleintitter, the two Viri, and Vuotcalla, and on the southern side a stony ground, seven or eight versts in length, to the Narva passage; hence, it is hardly possible to land on this island. A third part of it is rock, another third is morass, and the rest an arid and sterile sand-hill. The island has no springs. The seal fishery is here considerable. The inhabitants live together in one village.

LAVANSAARI is seven versts long and four versts broad. It is distant from St. Petersburg a hundred and twenty versts, and from Vyborg eighty-two. Of all the islands in the gulf of Finland this is the most populous, except Cronstadt, containing upwards of forty families. It is surrounded on the

* Clupea.

north-west side by several petty isles and shallows; it has however no less than three harbours, capacious enough for even a large ship to run into. In the middle of the island is a lake, small indeed, but full of fish. Somewhat of agriculture is in practice here; and formerly there were specimens of forests. The animals on this, are the same as on the foregoing islands.

PENISAARI is only three versts long and half a verst broad, and lies six versts from Lavanfaari. It is inhabited only by a few families, and has no water-springs.

SEITSAARI is five versts long, and about half as much in breadth, and is ninety-five versts from St. Petersburg, and seventy-five from Vyborg. The sand-banks here reach as far as to the Petersburg channel, and, being invisible from their lying under water, are so dangerous in dark nights, that in this place alone not fewer vessels have been lost than in all other parts of the gulf of Finland together. The land is everywhere unfruitful; in some of the marshes there is indeed a slight crop of hay. Great numbers of eels and stone perch are caught here. The herring and seal fishery is here also considerable. The inhabitants make up about twenty families. Here is likewise a light-house.

CRONSTADT. This island was called by the Finns, Retufari, and by the Russians Kotloi ostrof*. In 1723, together with the town, it

* Kettle-island.

obtained

obtained the name of Cronstadt. It is situate at the eastern extremity of the gulf of Finland, which, from this isle to Petersburg, is called the gulf of Cronstadt. It lies west-north-west of St. Petersburg five and twenty versts; is seven versts from Oranienbaum, and from Sestrabek twelve. The island, from east to west, is thirteen versts long, by about two and a half in breadth; is flat, somewhat about eight fathom higher than the water-level; has some wood, chiefly birch, the black alder, and some firs. The soil, as is seen in digging the canals and docks, consists, under the scanty sod, of layers of clay, sand, and limestone. Two petty islands on its south side are occupied by forts, one of which is called Cronslot, and the other fort St. Alexander. There is still a third, on the northern side of the channel, smaller than either of these, bearing the name of St John. Cronstadt was built by Peter the great in 1710, as a town, and harbour for ships of war and merchantmen, to which purposes he had already designed it on laying the foundations of St. Petersburg. The town comprehends the easternmost part of the island, is spacious, containing a number of good houses, churches, and public edifices; but, on account of many inferior buildings, mean houses, vacant places, &c. by no means handsome. It is populous, especially in the shipping season, when the streets are thronged with mariners from all the ports of Europe, particularly the English; on whose account, as well as those of our countrymen, who are stationary on this island for
for

for the purposes of commerce, here is a chapel maintained by the Russia company of London, at which the service of the church of England is regularly performed every Sunday throughout the year, by a resident minister. The Lutherans have also a church on this island, for the use of the Germans. Numerous as the inhabitants of this place are, from the fleet lying here, the garrison, the custom-house, the corps de cadets, the labourers in the docks, yards, &c. together with their connections, and the families that live here for the reasons above-mentioned, yet the number of registered burghers is but small; in the year 1783, they were only two hundred and four. The man-of-war's mole, as it is called, in its present state, is well worth the attention of the curious, and accordingly is visited by the numerous travellers that take Petersburg in their route, with great satisfaction. It is inclosed by a strong and elegant rampart built of granite in the sea, under the direction of that gallant commander and upright man, the late admiral Samuel Greig, to whose unwearied activity and uncommon talents the russian navy is so highly indebted, and whose loss will not easily be compensated to the empire. Here are also the celebrated Peter's-canal, and the docks. The canal was begun under Peter the great, and completed by general Lubras in the reign of Elizabeth. At the end of the canal stand two pyramidal columns with inscriptions relative to this undertaking. It is lined with masonry, is 1050 fathoms long, in

breadth at the bottom sixty fathoms, and at top a hundred ; it is twenty-four fathoms deep, and in this manner stretches three hundred and fifty-eight fathoms into the sea. Adjoining to the canal are the docks, in which ten and more ships of the line may be refitted at once. They are furnished with floodgates for admitting and letting out the men of war. The water is evacuated from the basin by a steam-engine constructed by an english engineer, and is worked by coals from England. Here is a foundery for casting cannon-balls, under the direction of that ingenious artist Mr. Baird, from North Britain ; and a rope-walk for making ship's cables of all sizes. — The marine cadet-corps was founded by Peter the great in 1715, for the education of sea-officers ; and the empress Elizabeth enlarged it in 1752, for three hundred and sixty pupils. It is now removed to Petersburg, on the Vassili-ostrof, where it had been before it was placed at Cronstadt ; being under the superintendence of an admiral, till lately admiral Kutusof, and having officers of the navy for its inspectors. The cadets are of noble families, and divided into three companies of a hundred and twenty each. They are instructed in languages, geography, astronomy, naval architecture, and navigation, in climbing the shrouds, in handling the rigging, swimming, &c. The greater lads who are called mariners, are taught all the functions of the service ; and, in order to become midshipmen, the lowest rank of officers, must have made three
voyages

voyages as cadets. Their uniform is green, with white facings and under-clothes. — The marine hospital at Cronstadt is on a very extensive scale. In 1788, it had at several times 25,007 patients; and in 1789, it had 16,809. Of the former number 20,924 went out cured, and of the latter 12,974.

BALTIC PORT. This is the same with Rogervyk, from Rog, the island in which it is formed.

SECTION V.

Of the inland Seas, and principal Lakes of Russia.

The Caspian.

THIS large body of water, being not visibly connected with any of the great oceans, and apparently not having an outlet, has been thought by some writers not properly to deserve the appellation of a sea, but to be more fitly classed among the larger lakes. However, on account of its fishery and the persian commerce it is of great consequence to the empire.

The Caspian, mare Caspium, was antiently called by the Greeks the Hyrcanian sea; the Tartars give it the name of Akdinghis, the White-sea; by the Georgians it is termed the Kurtshenskian sea, and the Persians denominate it Gursen, from the old persian capital, Gurgan, which is said to have stood

in the province of Astrabat, only seven versts from the sea. The name Hyrcanian sea is as much as to say the persian sea; for, in the persian language, Persia is not called the persian, but the Hyrcanian empire. The Caspian reaches in length, from about the 37th to the 47th degree of north latitude, and in breadth, where it is the widest, from the 65th to the 74th degree of longitude. Its superficial contents amount to above 36,000 square miles, english *. The antient geographers had but a very imperfect knowledge of it. Some thought it was connected with the Frozen-ocean, while others were of opinion that it joined with the Euxine. Ptolemy, among others, embraced the latter hypothesis; affirming that there was a subterraneous communication between the waters of both: as, otherwise it was not to be explained how so many large rivers should flow into the Caspian, for which there was not one channel out of it. And, indeed, who can wonder at the difficulty in which they found themselves involved? For what becomes of the waters of the Volga, the Yaik, the Yemba, the Kur,

* What M. Pallas says of the antient extent and decline of the Caspian highly deserves perusal, in his travels, part iii. p. 569 & seq. But the insertion of it here would render the article too prolix for the design of this work. It is not only probable that its antient shore might be fixed at the Obsltshei-Syrt, but that the Caspian was once connected with the Baltic, and this again with the Euxine; whereof a proof may be seen in the quality of the earth in all these parts.

or Cyrus, of the Araxes, the Bystraia, the Akfa, the Koisa, the Terek, and the numberless others that flow into it? By the sun alone they cannot be evaporated *; there is no visible outlet for them; and yet the sea is never perceptibly swollen, except merely in the spring on the melting of the snows.

They who have recourse to subterraneous passages, through which it must flow into the persian sea, or more probably into the Euxine, usually bring two arguments in support of their notion. In the first place, say they, the Caspian rises very high in a westerly wind; whereas the Euxine, on the contrary, rages most when the wind is at east: consequently, the east wind favours the exit of the waters of the Caspian, and the west wind impedes it. But this is a fallacia, causa non causa. All the winds that bring humid vapours with them are more stormy than those which come from arid regions. But now the west-wind comes hither from the Euxine and the Palus Mœotis. Consequently the Caspian must necessarily be put in more vehement agitation by it.

Secondly, it is pretended that there is in this sea a whirlpool, which, with a horrid noise, swallows up all the superfluous water, and discharges it into the Euxine. In proof of this, it is farther urged, that a species of sea-weed, growing only on the

* For a more particular discussion of this matter, the reader is referred to the state of Russia, by the ingenious Capt. Perry, p. 160 & seq. printed at London, 1716.

shores of the Caspian, is found at the mouth of this tremendous vortex. To which they add, that near to this vortex is a sort of fish caught no where else but in the Euxine. And lastly, that in days of yore, a fish was taken in the Caspian sea, with a golden ring about its tail, on which was this inscription : *Mithridates mihi dabat in urbe Sinope libertatem et hoc donum* *. But later accounts know nothing of a whirlpool; the fishes that are said to be found only there and in the Euxine, we shall be better able to speak of when they are more accurately described; and the story from Kircher has very much the air of a fiction. Sea-weed grows everywhere on the shores of this sea, from Astrakhan to Sulak, and thence again to the muganian steppe.

The natural evasion of the waters of the Caspian into the Euxine is therefore an ungrounded hypothesis. An artificial channel was attempted by Seleucus Nicanor, after the death of Alexander the great: but, from causes unknown to us, his attempt proved abortive. However, it is asserted by travellers, that traces of very deep valleys are still to be seen, through which the canal is said to have gone. In the reign of Peter I. it was that the Caspian began to be more accurately surveyed, when it was found to be in length about eleven hundred versts from the mouth of the Ural to the coast of the Masanderan: its greatest width

* Kircher, *Mund. subterr. lib. ii. cap. 13.*

from

from the mouth of the Terek to the extremity of the bay of Mertvoi Kultyuk, is 8° , rather more than seven hundred versts. At its southern extremity, from the point of Lenkeron to the peninsula situate at the mouth of the bay of Balkan, 6° , somewhat more than five hundred and twenty-five versts, and at its greatest width $2^{\circ} 35'$, or two hundred and twenty-five versts. Its circumference, comprehending the great gulfs (though excluding the little sinuosities) is 4180 versts.

The coasts of the Caspian, northward, from the Terek towards the west, as far as the eastern extremity of the bay of Mertvoi Kultyuk, are low, flat, swampy, and overgrown with reeds; the water too is shallow. On the other shores from the Terek to the desert of Korgan near Astrabat, and from the northern part of the bay of Balkan to that of Mertvoi Kultyuk the country is mountainous, the shores bold, and the water very deep. Of the rivers that were formerly supposed to disembogue into it, several do not exist, for instance the Yaksartes and the Oxus, which were pretended to flow hither from the east *. The chief of those that are known to fall into it are: The Emba, the Ural, the Volga, the Kumma, the Terek, the

* The Yaxartes is the Syr-Daria that falls into the Aral. The Oxus is the Ula, or the Amu-Daria, which takes its rise in the Aral. See d'Anville, Muller, Dictionnaire Geographique de Poloudinier, article Aral, and the general charts of the academy of Petersburg.

Sulak, the Agrakhan, the Kur, and the Aras.—It is related as a striking peculiarity of the Caspian, that during thirty or thirty-five years its waters are constantly increasing, and then for the same term continually decrease; but this story is unsupported by any stated observations. Much more certain are the violent and dangerous storms * which frequently happen on this sea. The ground in many places, not far from the shore, is already so deep that a line of four hundred and fifty fathom will not reach it. The water in general is salt; though not in all places, particularly not in those where the great rivers empty themselves into it. The shores are for the most part flat, and only on the east side mountainous.

Perhaps the true reason of this sea remaining equally full, is to be sought in the quality of its bottom; which consists, not of a thick slime, but of a shell-sand, the particles whereof touching but in few points, it is consequently very porous. Of the same substance the whole shore is likewise formed. Layer upon layer it lies three fathoms deep. This indeed lets the fresh water through, but it becomes immediately salt again by the salt water pressing on it. Through this sand then the water is filtered, and falls into the abyss beneath in the same quantity as it flows into the sea.

In the bay of Emba, above the river Yaik, the reverse is seen. The water there is not let through:

* Burun.

it therefore stagnates, and even the fishes putrify. Its exhalations are extremely noxious. The wind that blows over this bay has been known to come on with such surprising force as to throw down the sentinels of the russian forts erected here, with so much violence as to kill them.

Of the fish with which these parts abound our accounts are not very circumstantial. The salmon, however, are as good as those of Riga and Archangel, and even more fleshy and fat. The herrings too are remarkably large, and plumper than the english and dutch, but not so tender.

This sea gives nourishment to myriads of the winged race. Storks, herons, bitterns, spoonbills, red geese, red ducks, and numberless others. But the most beautiful of all is the red goose*. It has however nothing in common with a goose, neither is it red, but white; the tips of the wings indeed, round the eyes, the beak and the feet are scarlet. It is of the size of a stork, has a long neck and high legs, is very favourable to the taste, and lives on fish. It may be called *Ciconia*, vel *ardea*, *rostrum aduncum* *brevi*.

A species of red wild ducks is also frequent here, which fly in the evening to the tops of the trees and the roofs of houses, where they perform a noisy concert. Their flesh is well tasted, not oily, though, like other water-fowl, they feed on fish.

* Russ. *krasnaia gus*.

Of leeches here are two kinds, the hog-leech and the dog-leech. Their holes have two apertures, one towards the south and the other facing the north, which they open and shut according to the change of the wind.

On the shore, between Terki and Derbent, grows a grass on which all the quadrupeds feed with avidity: to the horse alone the eating of it is fatal. They die upon the spot. Peter the great caused the experiment to be made in his presence, and the common report was found to be true.

The Caspian contains a considerable number of islands, mostly sandy; and to the fish above-mentioned we may add the following: the sterlet, two kinds of sturgeon, seals, and porpoises. Flux and reflux have here never been perceived.

The principal harbours and roads of the Caspian are: 1. Derbent; which, however, scarcely deserves that name; and even the road, by reason of its rocky bottom, is very incommodious. 2. Nisovaia-pristan, over-against the mouth of the river Nisabat, where there is a good road of firm sand. 3. Baku; here is the best haven in the whole Caspian, being full two fathoms in depth. 4. Sallian, in the northern arm of the river Kur. 5. Enfili, or Sinfili, has indeed but an indifferent roadstead, yet it is one of the principal ports of trade. 6. Medshetifar, and Farabat. 7. Tukaragan and

Man-

Manghishlak, have good harbours — The governments of Ufimsk and Caucasus border on the Caspian.

The Baikal.

It lies in the government of Irkutsk, and extends from the 51st to above the 55th degree of north latitude. The Russians style it a sea, *more Baikal* *; but, if the Caspian be not allowed that title, the Baikal can still less pretend to it; however, the Russians honour it yet farther by giving it that other name of *Svetoie more*, the holy sea. Whether it be lake or sea, next to the Caspian it is the largest body of water in the Russian empire. In length it is between five hundred and six hundred versts, and in its various breadths is twenty, thirty, fifty, and in some places seventy versts: being surrounded almost entirely with high and mostly bare mountains. Towards the latter end of December it is usually frozen over, and in the beginning of May the ice breaks up. The water of the Baikal is uncommonly clear, but it is subject to frequent storms, and these very violent, particularly in September. It abounds in fish, and contains, among others, great shoals of a species of herring, there called *omuli*. Here are also plenty of seals. The Baikal has some islands, whereof the principal bears the name of *Olkhon*, in the proximity whereof

* *Mare Baikal.*

fulphur sources are found. Among the rivers that empty themselves into this sea, the principal are: the upper Angara, the Bargusin, and the Selenga, which join it from the north, the east, and the south; whereas, only one stream, the great Angara, in the west, derives its origin from it. Travellers intending to go beyond Irkutsk, into the remoter eastern parts of Siberia, commonly take their passage across the Baikal. There is indeed a road that lead rounds it, but it is attended with great difficulties.

The LADOGA lake. It lies in the government of Vyborg, between the gulf of Finland and the lake of Onega. In antient times it is said to have been called Nebo. Being in length a hundred and seventy-five, and in breadth a hundred and five versts; it is reckoned one of the largest lakes in Europe. It produces a great number of seals. On account of the perilous storms to which it is liable, and the several sand-banks that are ever shifting their position, Peter the great caused the famous ladoga canal to be dug along its shore, from the Volkhof into the Neva; which canal is a hundred and four versts long, ten sajènes broad, one sajène and a half deep, and has twenty-five sluices. By the Neva the Ladoga is connected with the Baltic; by the Svir with the Onega; and by the Volkhof with the Ilmen. Into the canal flow the rivers Lipke, Nasia, Sheldika, Lava, and Kabona; into the lake, the rivers Pasha, Siæs, Oiæt, &c. — whereas the
Neva

Neva alone runs out of it. — Both shores of the lake belong to Russia, which have everywhere a flat coast and a sandy beach. On this shore it has also a few low fishery islands and a sandy bottom. That part of the northern side which lies in the government of Olonetz has marble on its coast, whence some of those beautiful and durable kinds of finnish marble are brought to St. Petersburg. As the bed of this lake, for a great extent, is in the lowest part of the country, it receives besides the above-mentioned rivers, the waters that come from the alum hills; all of which, as before observed, have no other outlet than the Neva.

The lake ONEGA. It lies in the government of Olonetz, between the Ladoga and the White-sea. Its length is between a hundred and eighty and two hundred versts, and its breadth from sixty to eighty. Like the Ladoga it contains a few islands consisting of marble, and in all other properties is much the same. With other rivers, the Vitegra falls into it on the south-east side, which river takes its rise not far from the Kosska, which falls into the Bielo-ozero. On the Kosska is the pristan Badoga, and on the Vitegra the pristan Vitegorfskaia, which are only about forty versts asunder. Now, as from the Onega the navigable river Svir runs into the Ladoga; and from the Bielo-ozero the Sheksna flows into the Volga, there needs only a canal to be cut the said distance of forty versts, for connecting the Neva with the Volga, which would be much more convenient for the navigation

gation here than the passage by Vishnoi-volotshok, because there are no waterfalls, and therefore all the danger and trouble attending them in the present passage would be obviated.

The lake PEIPUS, or Tshudskoe-ozero. It lies between the governments of Pscove, Reval, Riga, and St. Petersburg, extending in length to about eighty, and in breadth to sixty versts. By means of a very broad strait it is connected with the Pscove lake, the length of which is stated to be fifty, and the breadth, which is always decreasing, forty versts. This latter receives the river Velikaia. Out of the Peipus comes the Narova, which through the Embach has communication with the Vertz-erb lake; out of this, on the other hand, flows the Fellin into the gulf of Riga; and consequently a very beneficial water passage might be made between Riga and some of the inland provinces, by way of the Peipus lake. — The commodities which go to Narva along the Narova are obliged, on account of the falls in that river, to be carried a great way by land. There are a few small islands in the Peipus, but not of consequence enough to deserve much notice, excepting indeed Porka or Bork, called by the Esthonians Porkasaar, which is not only inhabited, but is furnished with forests, and has no less than three villages upon it. A little gulf that is constantly incroaching more and more upon the land, may, in no great space of time, compel the inhabitants in its vicinity to shift their habitations. —

Among the several brooks and rivers that flow into the Peipus, the Embach is the most considerable. The exit is through the Narva river into the gulf of Finland. It greatly facilitates the commerce between Pskov, Dorpat, and Narva; though this advantage might doubtless be rendered more beneficial, and extended to more districts by some improvements; particularly if Dorpat could be enabled to send the products of the circumjacent country by water to Narva. Instead of six horses and as many men, the transport of a load of rye would then require only two people. — In stormy weather the badly-built barks and other vessels are not unfrequently very much damaged; an inconvenience that might easily be prevented by orders from the magistracy to construct the vessels by certain regulations. — The vast multitudes of fish that breed in this lake afford a lucrative occupation to the boors of these parts, and increase the revenues of the adjoining estates, the owners of which let out the parts on which their lands abut at a certain rent. The corn lands adjacent to the shores are by no means sufficient to the nourishment of the people employed in the fisheries; this deficiency, however, is abundantly supplied in autumn and winter, by the barter of fish against flour. The fish are principally, rebsé, a species of herring, and barbel. The former are sold from thirty to ninety kopeeks a thousand. A hundred barbel will cost from three to six rubles, but for a live one they will get at least twenty kopeeks.

Beside

Beside these, here are caught pike, perch, a species of carp, whiting, quabb, korushki, gudgeons, &c. The pike and some others are dried in the air and exported; the rest are sometimes smoked. If the fishermen were rich enough to keep a provision of salt always ready for salting what they do not immediately sell of a good capture, they would not be obliged to throw away so much putrid fish as they do, to the loss of their profit and their labour.

The ILMEN lake, formerly Moisk, lies in the government of Novgorod, and is about forty versts in length and thirty in breadth. It receives the rivers Msta, Lovat, Shelon, &c. and gives birth to the Volkhof alone.

The BIELO-OZERO, or White-lake, is in the same government with the foregoing; is about fifty versts long and thirty broad, and receives into it several smaller streams. The only one that flows out of it is the Sheksna, which falls into the Volga. The water of this lake is clear, having a bottom partly clay and partly stony. The clay is generally of a white colour, and in stormy weather causes a strong white foam upon the surface of the water. Doubtless it is from this circumstance that the lake first obtained its name Bielo *. It contains plenty of fish and crabs.

The lake TSHANY lies partly in the government of Tobolsk and partly in that of Kolhyvan. It

* White.

communicates with the lakes Moloki and Abishkan, is of a very considerable circuit, and abounds in fish.

The lake ALTYN-NOOR, or Teletzkoe-ozero, lies in the government of Kolhyvan, on a very considerable elevation of the altaian mountains, by which it is also entirely furrounded. Its length is computed at a hundred and twenty-six, and its greatest breadth at eighty-four versts. From this lake arises the famous river By, which, at its conjunction with the Katunia, takes the name of Oby.

Of the chief navigable Rivers of Russia.

So vast an empire as that of Russia cannot but have a great number of considerable rivers. I shall here only take notice of the most material, arranging them according to the several seas into which they flow.

Rivers that flow into the Baltic.

The DUNA. This is named by the Russians sapadnaia Dvina, and by the Lithuanians Daugava. It derives its origin from a lake in the government of Tver, at Biala, not far from the sources of the Volga, pursues its course through this and the government of Pscove, constitutes the boundary between the government of Polotzk and Riga, the republic of Poland and the duchy of Courland,

and falls not far from Riga, at Dunamunde, into the Baltic. In its course it takes up several smaller rivers, as, the Toroptza, the Evest, the Oger, and the Yagel, and from Courland the Bulder-Aa. The Duna is navigable all the way from its uppermost regions, facilitating the commerce from several governments, and from Poland and Courland, to an uncommon degree. About a thousand vessels and barks, of various dimensions, pass annually along it, to and from the aforesaid towns. It has however one inconvenience, which is, that near Dunamunde, there are a great many shoals, every year increasing and shifting their positions, which occasions much difficulty in the navigation. To this inconvenience may be added another, that, in the Dunaburg circle, there are several falls, the shooting whereof is attended with great difficulty and danger. Some reckon these falls at fourteen in number. I shall only mention one near Seleburg, another by Lennevarde, and a third adjacent to Rummel. This third is the last the vessels have to shoot before they come to Riga; the first is highest and most dangerous; a concealed point of rock threatens all the floats and vessels that shoot the fall with imminent destruction, and numbers, at low water, perish without redemption. The steersman, notwithstanding he has taken a pilot on board, must exert the utmost caution. The noise of the water allowing of no oral commands, they are usually given by the hand or by waving the cap; and

and the people just ere they come to the verge of the watery precipice, fall down on their knees and pray. The frequent disasters that happen here are very profitable to the courish boors that lurk in the adjacent caverns, for the purpose of appropriating to themselves what they can from the wreck. No remedy has hitherto been devised for this great nuisance. Between Uexkull and the Rummel, in the bed of the river, lie a number of large stones, some of which have been already blown up at the expence of the corporation of Riga. These obstacles do not allow at all seasons of the year a free passage, which is only commodious or attended with the least danger at high water in the spring. The few vessels whose owners resolve on a voyage back, against the stream, are obliged not only to be drawn by men, but must be unloaded at the falls. The constant defection of the water in summer renders the voyage still more difficult and tedious; on the early coming on of autumnal frosts utterly impossible. — At Riga the Duna is nine hundred paces broad. Here annually in April a bridge of pontoons is thrown across it, and fastened by poles, except the part that opens to let the ships go through, which is fixed to anchors. Generally in November the river is covered with ice, which in March or April again breaks up. The frost not unfrequently makes the river passable on foot in the space of eight-and-forty hours. The bridge is then taken away, and safely laid by in a

small arm of the river, called the Soodgraben. The whole summer through, the great number of ships of all nations lying close to the bridge on both sides, is allowed by all travellers to be a fine sight. — This Duna is the port of Riga. — But, as nothing is perfect, this beneficent river often puts the city and the circumjacent territory into the most serious alarm, and does them considerable mischief. In the spring season the ice drives hither from Lithuania; while about the town and to the sea all is still fast. The outlet being stopped, and the accumulation continually augmenting, the most lamentable inundations have been frequently occasioned. That of the year 1771 is from the loss of people, houses, and cattle, and a damage of more than two hundred thousand dollars in amount, still fresh in the memory of all men. In 1770, the cutting-through of the solid ice greatly facilitated the evasion of what was floating, which also run off in 1772, without causing any damage. The salmon of the Duna are the most excellent and the dearest of all Livonia. To conclude, this river has in general a sandy and clayey shore, and a discoloured water.

The NEVA. It draws its current from the lake of Ladoga, traverses the government of St. Petersburg for sixty versts in length, flowing through the city, and at last falling in several arms into the gulf of Cronstadt. It reaches the city under the walls of the Nevski monastery, after having just above it

admitted the waters of the rivulet Ohta. The several mouths of the Neva are all within the city; and are called: the Nevka, which runs on the right side, in the Vyborg quarter, among the hospitals, and flows in a beautiful stream, north-westward and then westward into the gulf. On its western direction it divides on the right into the great Nevka, and on the left into the little Nevka, thereby, and by cross arms, forming islands. Across this division runs the Karpovka, a morass-brook, from its left side, to the little Nevka, and thereby forms the Apothecary island. The Nevka, the great * Nevka, and the little † Nevka, are from fifty to a hundred fathom broad, have shallow places, some of which are often dry, good neva-water, and flow sluggishly. The FONTANKA goes from the Nevka, on the right of the Neva, flowing as a slow morass-brook, first southerly, then westward parallel with the Neva, to the Cronstadt gulf, into which, with the great Neva, it formerly fell into two arms. In the former reigns it had been deepened and lined with sides of timber, but gradually filled up again, and in summer was partially dry. By order of her late majesty it was dug afresh, to a bed of one fathom in depth, and in breadth ten or twelve, and its sides faced with hewn granite raised on piles to the height of a fathom above the water's level, with an iron balustrade; and without side of this, a pavement five feet broad

* Bolshaia Nevka.

† Malaia Nevka.

of granite flags, for the accommodation of foot passengers. Its banks are now full of fine flowing neva-water, is navigable for barks of burden, and constitutes one of the chief ornaments of this imperial residence, worthy of the great and benign sovereign who honoured it with her throne and her presence. The expence of this undertaking, which Catharine the second begun in 1780, by general Bauer, and completed in 1789, by prince Vasemskoi, was truly imperial. The length of the river is nearly three thousand fathoms or about six versts. Every fathom of which on either side, without reckoning the digging of the river, or the procuring and the driving of the numberless piles for the ground-work, and exclusively of the sumptuous bridges of ornamented granite that cross it at various distances, the embanking it alone with granite cost at first a hundred and eighty-two rubles, but this price gradually rose higher and higher, till at last three hundred rubles were paid for every fathom in length on either side. — The MOIKA runs from the right of the Fontanka, not far below its departure from the Neva, and flows almost parallel with it, wherein it falls to the left of the great Neva, close above its mouth. It was a morass-brook, like the Fontanka, and like it had been dug out in one of the former reigns, and faced with wooden walls. In this state it still remains, much choaked up in various parts, consequently the water runs very slowly in summer, and is far worse than that of the Neva ; however it is
useful

useful for culinary purposes. The empress had signified her intention of having this river dug out and banked with granite, for the benefit and decoration of the city. — The KATARINA-CANAL, was likewise a swamp-stream, running above the Moika, and falling into the right side of the Fontanka, not far above its mouth. Catharine the second caused it to be made between seven and eight fathom wide, and one fathom deep for its bed, and to be faced on both sides, for its whole length of four versts, with granite, like the Fontanka, and to be furnished with foot-ways, an iron balustrade, and descents for the conveniency of taking up water. An arm of it, finished in the same manner, runs by the Nikolai church, from the right side of the Katarina-canal, to the Neva, and is called, The NIKOLAI-CANAL. That, named after the sovereign, the Katarina-canal, was begun in 1764, and finished in 1790. It has very much drained the low quarter of the town through which it passes, and procured it the advantage of pure running water, and a passage for barks loaded with wood for fuel, iron, and other necessities. — The LITTLE NEVA* goes off from the main river on the right side under the walls of the fortress, and flows west-north-westward to the gulf. It is broader than the great Neva, but more shallow, and purposely rendered innavigable by Peter the great, on account of Sweden and the customs. Its right

* Malaia Neva.

shore is left in its natural state, without buttress, and has a parallel arm at the Petrovka, which, flowing to the Nevka, forms the isle Petrovsk. The left shore has above, as far as the buildings on the Vassilli-ostrof reach, a buttress of timber, and lower down, in the woods, two morassy collateral arms that form islands, and are called Tshernaia retchka, or the black rivulet. — Having made this distribution of waters, the main stream, or the great Neva, flows, in a south-westward direction, from a hundred and fifty to upwards of two hundred fathoms in breadth, and in some places of great depth, into the Cronstadt-gulf. Its right bank, as far as the buildings on the Vassilli-ostrof reach, is supported by a wooden buttress five or six foot high. The whole extent of the left-hand bank, Catharine the second caused to be quayed with granite, from the foundery to the farthest extremity of the Galerenhof, excepting only the space in front of the admiralty. This grand work, which was begun in 1764, and completed in 1788, is distinguished from the stone margin of the Fontanka by still greater strength and more magnificence. The ground under water is rammed with piles for three fathom in breadth, with long trunks of fir trees, two fathoms and a half in length. These piles were driven during the winter by engines placed on the ice, and in the summer sawn deep under the surface of the water, by machines contrived for that purpose. This done, the foundation was laid, first by filling the interstices of the

the

the piles with flints and pebbles, then placing upon this solid basis several layers of flat pudoffkoi pliets, a hard kind of stone so called, consolidated together by a tried cement, which was then built upon with squares of granite of $1\frac{1}{2}$ to $2\frac{1}{2}$ foot thick, and the wall finished above as a foot pavement a fathom broad, covered with similar quadrats, at the height of ten feet above the water. The parapet is also of the same hewn granite, two feet and a half high, and one foot and a quarter in thickness. At certain distances openings are made in the quay for descending upon the ice in winter, and stairs with spacious landing-places and benches, for taking up water, unloading the barks, and for the repose and convenience of those who walk here for business or pleasure. Lastly, the face of the wall is furnished with maffy iron rings, for the fastening of galliots, barks, barges, and other vessels. This truly imperial quay is, for its length, which, deducting the space before the admiralty, is 1650 fathom, or three versts, for strength, magnificence, and the cost of building it, unequalled in Europe, and the constant subject of admiration to foreigners. — In the gulph of Cronstadt, just facing the mouth of the Neva, near the southern shore, lie two low marshy islands, with brushwood upon them, of which the greater is called Dolgoi ostrof, or Long island, where a considerable fishery is carried on. — Besides these several streams, there is another canal within the town, lined with brick-work and masonry, surrounding the

the admiralty; likewise some short canals with wooden sides, which, running between the Neva and the Moika, part the galley wharf and New Holland. — The LIGOVA canal, twenty versts long, has its water from the Duderhof hills, with which it supplies the fountains of the imperial summer gardens, distributing it also to the gardens of the late prince Potemkin, and at the same time supplying that quarter of the city with water.

The water of the Neva, and its several arms and running canals, which, besides the Ligova canal, supplies the whole city, is to be ranked with the lightest, clearest, and purest of river waters. Foreigners indeed, for the first month or two of their stay at St. Petersburg, perceive a certain alteration in their habit of body, becoming more lax than usual, which has chiefly been laid to the charge of the neva water. This induced Model, and afterwards Georgi, both professors of the imperial academy, to submit it to a chemical process: when the former found, in eighty medicinal pounds of the water, taken above the city, only sixty-eight grains of calcareous earth and three grains of vegetable extract; and the latter, in fifty pounds of water, taken within the city, no more than forty grains of calcareous earth, and five grains of extract; he found it also very poor in air. The accident to foreigners seems, therefore, to be more owing to the change in their way of living and other causes, than to proceed from the water of the Neva, which
amply

amply compensates the want of wells and springs to the city.

In still weather, the level of the water in the several outlets varies about two feet; strong and continued east winds drive the water quicker into the gulf, and accordingly it is three or four feet lower than the mean height. On the contrary, strong, lasting west winds so greatly restrain the current that the river rises about as much above its mean height. In continued storms from the west, it rises in the arms, measured at the fortress, five, ten, fifteen, and more feet. At five feet it overflows only the shores without buttresses in the western quarter of the town; at ten feet and upwards of increased elevation, only the eastern part of the town remains not overflowed. This has frequently happened; but, by good luck, the inundations hitherto have always lasted only a short time, generally but a few hours; and, by reason of the progressive heightening of the parts built upon, by the rubbish of old, and the materials of new erections, by digging canals, &c. they become more rare and less injurious.

Some thousands of ships and barks annually pass and repass the Neva, either coming from the inland parts of the empire, or from foreign countries across the seas, bringing commodities and provisions to the amount of several millions of rubles, to St. Petersburg. — This river receives in its course the Ijora and the Tosna.

Rivers

Rivers that fall into the White-sea.

The DVINA. This river is called by the Russians *severnaia Dvina*, the northern Dvina; which name it first assumes on its junction with the two rivers the Sookhona and the Youga, which arise in the government of Vologda. This junction is formed at the city of Ustiug, whence the Dvina takes a north-westward course; and at Archangel falls into the White-sea, after having divided itself into two considerable arms. In its course it takes in some pretty large rivers, and several lesser streams, such as, on the right, the Lusa, the Vichegda, and the Pinega; and to the left, the Vaga, the Yemza, &c. Opposite to the mouth of the Pinega stands the antient city Kholmogor. The merchant vessels run into the eastern arm of the Dvina, on which the fort Novaia Dvinka is built; but at first the western, where stands the monastery Korelskoi monastir, was the most frequented. This however is now no longer passable. In general the shoals increase from year to year in both, and such large ships cannot now run in as formerly. The Dvina has the honour of having given reception in 1553, to the first english ship that ever came to Russia. To conclude, it flows mostly through a swampy and woody region, is navigable from Ustiug, and is tolerably abundant in fish.

The KULOI, and the MESEN. Both flow eastward of the Dvina, into the White-sea, not far from each

each other, in the district of the town of Mesensk. The former takes its rise in the government of Archangel; the latter in that of Vologda. In their not very extensive course they admit the waters of several smaller rivers.

Rivers that fall into the Frozen ocean.

All these rivers have a very perceptible ebb and flow.

The PETSHORA, called also Bolshaia, or great Petshora; to distinguish it from the Vishera, which the Siryanes call Petshorya, whence originates the name Petshora. The Petshora takes its rise in the western side of the Ural-mountains in the government of Vologda, follows a north-west course, and falls into the Frozen ocean, in the government of Archangel, after dividing into several powerful arms. It now flows through a low, foresty, and almost uninhabited country. At first, when Siberia was conquered, the way thither was generally by the Petshora. They sailed up the Dvina, the Vichegda, and the Vim, then went a short space by land to the Petshora, then up that river, and by land over the Ural-mountains, to the Sosva, from this into the Tavda, the Tobol, the Irtysh, the Oby, the Ket; and from the Ket into the Yenissey, &c.

The OBY. This originates properly in the Chinese Soongoria, from whence it issues in a copious stream, under the name of Tshulishman; and, in

52 degrees north latitude, and $103^{\circ} 30'$ longitude, falls into the lake Teletzkoe, in the russian territory. From this lake, which is called by the Tartars Altinkul, it flows out again under the appellation of the By, not taking that of Oby till its junction with the Katunya. Of all the rivers of the russian empire it is esteemed the largest. In its upper regions it has a strong current and several cataracts, but particularly a great number of islands, mostly in the circle of Berosof. At 67 degrees north latitude, and 86° longitude, it empties itself into the gulf of the same name, which unites it with the Frozen ocean in 73 degrees, 50 minutes north latitude, and 90 degrees of longitude. The principal rivers taken up in its course by the Oby, are, to the left; the Katunya, the Tsharysh, the Alei, the Irtysh, the Konda, and the Sofva; to the right, the Tshumysh, the Tom, the Tshulym, the Ket, and the Voch. Up as far as the mouth of the Ket, the Oby has mostly high and rocky shores; but farther on, quite to its entrance into the Frozen ocean, it, generally speaking, flows over a clayey, sandy, and marly bed. It is navigable till very near up to the Teletzkoe-ozero, uncommonly prolific in fish, and in many places is accompanied by forests of large pine and birch trees. The course of this river extends about three thousand versts. Of its collateral rivers,

1. The IRTYSH is the most considerable. It rises likewise in the Chinese Soongoria; flows through the lake Norfaisan, in north latitude 46 degrees

degrees 30 minutes, then enters the Russian territory, and, after meandering through a large tract of country, throws itself in 61 north latitude, and 86 longitude, into the Oby. In its way it takes up the following rivers; to the right, the Buchtorma, the Ulba, the Uba, the Om, which is of a clear but black looking water, and the Tara, all of which again take in a multitude of smaller rivers and streams: to the left, the Ablaket, the Dfargurban, the Ishin, the Vagai, the Tobol, and the Konda. The Irtysh forms several islands, whereof some disappear at times, and their places are supplied by others; even its course is very variable, so that it is often navigable in a place where it was not before, and vice versa. Its water in the inferior regions is whitish and light, whence it should seem that it flows over a bottom mostly of calcareous marl. It swarms with fish, and its sturgeon are of a flavour particularly delicate.

2. The TOBOL takes its rise in 52 degrees 30 minutes north latitude, and 81 degrees longitude, in the country of the Kirghistzi, in the chain of mountains that parts it from the government of Ufa. It pours itself into the Irtysh, at Tobolsk, after running a course of about five hundred versts, during which it takes in the following rivers: the Ui, the Isset, the Tura, and the Tavda, which all fall into it on the left. Of these the Tura is the largest; it rises near Verkhoturia in the Ural-mountains, in about 59 degrees of north latitude, and glides into the Tobol in 57 degrees

degrees 30 min. after having taken up the rivers Salda, Tegil, Pyshma, Nitza, &c. into which last mentioned, the Neiva, the *Ætsh*, and the Irbit flow. By this accession of waters the Tura becomes a considerable river, not much inferior to the Tobol itself.—The Isset is likewise a river of some consequence. It rises out of a lake two versts from Ekatarinenburg; and, after having taken up several rivers, as, the Sifert, the Sinava, the Tsetsha, and the Miæs, falls into the Tobol in 57 degrees north latitude.—The Tobol has mostly low shores; and in the spring season frequently sheds its waters far around.

3. The YENISSEY, which the Tartars and Mongoles who inhabit the superior regions of it, above the Tunguska, call Kem, and the Ostiaks, Gub or Kheses, which signifies the Great river, is at first composed of two rivers, the Kamfara and the Veikem, originating in the chinese Soongoria (or Bukharia) and form a conjunction in 51 degrees 30 minutes north latitude and 111 of longitude. About the mouth of the Bom-Kemtshyug it enters on russian ground, and hence first takes the name of Yenissey. After various windings it now tends northward; and in 70 degrees north latitude and 103° 30' longitude, forms a bay containing several islands; and at last, in 3 degrees 30 min. of length, falls into the Frozen ocean. In autumn, when its water is at the lowest, its breadth, e. gr. at the town of Yenisseisk, is

is about 570 fathom, whereas in the spring it is 795 fathom and upwards. The coasts of the Frozen ocean, between the mouths of the Yenissey and the Oby, are called the Yuratzkoi shore. The more considerable streams taken up by the Yenissey are the following: on the right, the Ufs, the Tuban, the Kan, and the three Tunguskis, that is, the upper, the middle or podkammenaia, and the lower Tunguska. On the left: the Abakan, the Yelovi, and the Turukhan. The Yenissey, in its superior regions, flows over a very stony bed; and its shores, particularly the eastern, are mostly beset with lofty mountains and rocks. It has in general a very rapid course, though near its mouth it flows so gently that the current is hardly to be perceived at all. In the neighbourhood of Turukanak and elsewhere it forms some considerable islands; and between the cities of Yenisseisk and Krasnoyarsk, several cataracts are to be seen. The Yenissey is navigable from its mouth as far as Abakan, and yields great quantities of the best fish. Of all the rivers taken up by the Yenissey.

The TUNGUSKIS are the most considerable. The upper Tunguska arises out of the Baikal, and bears the name of Angara till its union with the Ilim. Besides that, it takes up several other rivers, as, the Koda, the Tshadovetch, the Iriki, the Kamenka, the Olenka, and the Tatarskaia, all on the right: to the left the Oka, and the Tshuna or Uda.

This Tunguska has mostly a stony bed, strewed with rocks; with several cataracts, five of which are very considerable. Though navigable the whole summer through, it must yet be confessed, that this navigation is toilsome and difficult. — The middle Tunguska takes its rise in the government of Irkutsk, among the Baikal-mountains, not far from the origin of the Lena; and, after a course of about eight hundred versts, and after having, on the right, taken up the Tshiucha and the Tshorna, falls into the Yenissey in 62 degrees north latitude. — The lower Tunguska takes its source, indeed, in the same district, but bends its course northward; and after having taken up on the left, the rivers Niepa, Svetlaia, with many others; and on the right, the Rosmaknika, the Turiga and the Gorela, and run a course of about fifteen hundred versts, strikes into the Yenissey, not far from Turukansk. Near the Turukanskoi-Troitzkoi-monastir, are several dangerous whirlpools in it.

4. The KHATANGA. It arises out of a lake in the government of Tobolsk, in about 68 degrees north latitude; and 110 longitude; and in 120 longitude rushes into a large bay of the Frozen ocean, called Khatanskaia guba. This river shapes its course for the most part through a low and very marshy country. The most considerable rivers taken up by the Khatanga, are the Kheta and the Potigan.

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5. The

5. The LENA. This is the greatest river of eastern Siberia. It takes its origin on the north-western side of the Baikal from a morass, runs at first westwards, then along to the district of Yakutsk eastwards, and lastly towards the north, where after having divided itself into five great branches at its mouth, and thereby formed four considerable islands, it flows into the Frozen ocean. Its course is computed to be five thousand versts. Its source is in 52 degrees 30 minutes north latitude, its mouth in 73 degrees latitude and the eastern arm in 153, and the western in 143 degrees of longitude. The Lena has in general a very gentle current. The bottom is mostly sandy, and the shore only in the upper regions beset with hills and cliffs. It takes in a multitude of smaller rivers; the most considerable of which are to the left: the Mansurka, the Ilga, the Kuta, the Inæ, the Viluy, and the Muna: to the right, the Kireng, the Vitim, the Patoma, the Olekma, and the Aldan, into which again several brooks transmit their waters. But of all these the largest are the Vitim, the Olekma, the Viluy, and the Aldan. Out of the Lena travellers pass into the Aldan, from that into the Maia, and from the Maia into the Yudoma, from which they have but a short route to make by land to Okhotsk.

6. The YANA. It takes its origin out of a little lake, in about 64 degrees north latitude, directs its course, with some small turns, towards the north, and previous to its discharging itself into the

Frozen ocean, forms five considerable arms, which issue in a capacious bay. No large river, but a great many small streams flow into the Yana.

7. The INDIGHIRKA arises in nearly the same latitude as the Yana, in the Stanovoi-Krebet, is reinforced by the Amekon, and a multitude of smaller rivers; and falls, in four great arms, into the Frozen ocean.

8. The KOLYMA, or KOVYMA, arises also in the Stanovoi-Krebet, almost over against Okhotsk; is much invigorated by the waters of numerous rivers, particularly the Omolon, forms a multitude of islands, and by means of four broad arms flows into the Frozen ocean.

Rivers that flow into the Eastern or Pacific ocean.

The ANADYR. This arises in the country of the Tchuktchi, out of a lake among the frontier mountains which are a continuation of Stanovoi-Krebet, here called Yablonoi-Krebet; and is therefore to be distinguished from the nertschinskoi chain of mountains which also bears the name of Yablonoi-Krebet. The former has its appellation from the brook Yablona, which is the first considerable stream that runs into the Anadyr, on the right. Indeed it admits a great many other streams on either side; but they are none of them very large. The bed of the Anadyr is in general sandy, and its current is by no means rapid; its channel is very broad, and contains a good number of isles, but throughout of

so little depth, that it can scarcely be crossed in any part with the common ferry-boats of that country, called *shitiki*, which have no iron in their construction, being only sewed together, and drawing no more than two foot water. Only at the going off of the ice is the stream of any tolerable depth, from the mouth of the *Krasnaia* to the place of its exit. From the source of the *Anadyr* to the brook *Yablona*, not a wood is to be seen, but pure barren mountains; below the *Yablona* are some stripes of meadow-land and some poplar trees; and on the mountains to the left, for at least a hundred versts above *Anadyrskoi-ostrog*, are thin woods of larch trees and dwarfish fiberian cedars*. The whole of the northern region as far as the *Anadyr*, is in general destitute of standard trees, and has scarcely any pieces fit for pasture; whereas south of the river, at no great distance, especially about the head of the main, the *Penshina* and the *Aklan*, are tall timber forests in abundance. From the *Anadyr* quite to the *Kolyma* and the Frozen ocean, and throughout the whole country of the *Tchuktchi*, no more forest has been discovered; nay, in this last country, the meadow-shrubs scarcely shoot above a span high; as in the whole tract along the northern coast of *Siberia*. But so much the more frequent are the flats, overgrown with yellow and white moss, on which innumerable herds of wild rein-deer find pasture.

* *Slanetz*.

The KAMTSHATKA, on the peninsula of that name. It rises in the southern half of it, takes its course northwards, but turns westward, and falls below Nishnei-Kamtshatskoi, into the ocean.

The AMOOR. It is formed of the two rivers, the Argoon and the Shilka, and first takes this name on their conjunction, and therefore first on the chinese territory. The Shilka obtains its source in the high mountains, runs with them through the nertschinskoi district, and on the left takes up the Ingoda, with several other rivulets. The Argoon arises out of a lake just upon the frontiers that part Russia from China, and forms the border all the way to its exit in the Shilka.

By the treaty of 1727 the Amoor belongs entirely to China; otherwise, the ship-building on the sea of Okhotsk would be greatly facilitated to the Russians, as much of the materials might then be brought by water which now come by land at a great expence,

Rivers that fall into the Caspian.

The YEMBA or EMBA. It takes its rise in the southernmost part of the Ural-mountains, and constitutes the border between the ufimskoi government and the country of the Kirghizti, though the forts are much more to the west, namely on the river Ural. The Yemba takes up only one river of any note, the Sagis, has a strong current, but is at the same time very shallow. It is the most eastward of all the rivers that fall into the Caspian.

The

The URAL (formerly the YAIK) has its source in the western sides of the Ural-mountains, breaking out of them near the fort of Orsk, for a long tract strikes its course westward, but from thence runs directly south, and, at about 47 degrees north latitude, and 70 degrees longitude, falls into the Caspian. It is a large river of a rapid current, and pure water, known to the antients under the name of RHYMNUS. Its course is computed at three thousand versts. It has formed from times immemorial the limits between the Kirghistzi and the Bashkirtzi; and still there are upon it thirty forts and several foreposts, against the former. The most considerable rivers taken up by the Ural, are, to the left, the Or and the Ilek; and to the right, the Kifil, and the Sakmara. Its banks, in the upper regions, are ridged with steep and lofty rocks: but lower down it flows through a tolerably dry and very saline steppe. It is peculiarly abundant in fish.

The VOLGA, one of the most famous rivers of Europe. By the writers of antiquity it is sometimes named RHA, and sometimes ARAXIS, by the Tartars Idel, Adal, or Edel, (denoting plenty,) and by the Mordvines is still called Rhau. It takes its source in the government of Tver, in the Valday frontier mountains, from several lakes, flows thence through that and the governments of Yaroslaf, Kostroma, Nishney-Novgorod, Kazan, Simbirsk, Saratof, and Caucasus, and falls near Astrakhan into the Caspian, after having parted into almost seventy arms, and

thereby formed a multitude of islands. It is reckoned to travel in its course above four thousand versts. It is well known to be an old project of uniting the Volga with the Don, in order to be able, by means of this water-communication, to sail from the Baltic and the Caspian into the Euxine. Seleucus Nicanor, after him Selim II. and lastly Peter the great, attempted the execution of it, and, in all appearance were prevented from succeeding, certainly not by the impracticability of the matter, but by other circumstances. It is thought that this junction by means of a canal in the district of Tzaritzin, where the Don runs at the distance of only fifty versts from the Volga, would be more easily effected than by the proposed Kamishenka. — On the shores of the Volga are a number of very respectable cities and towns, as, Tver, Uglitsk, Romanof, Yaroslaf, Kostroma, Balochna, Nishney-Novgorod, Kusmodemiansk, Tshebaksar, Kazan, Simbirsk, Sistran, Saratof, Tzaritzin, and Astrakhan. It rolls its waters through many fertile regions, and in its inferior course is accompanied by beautiful forests of oak. In the spring it violently overflows, and is then navigable where at other times it is not. However, the chief navigation of it begins already at Tver. The Volga possesses this material advantage, that it has no cataracts, nor any otherwise dangerous places; but it is continually growing shallower from time to time, so as to give grounds for apprehension that it may one day be no longer navigable.

navigable for vessels of any tolerable size. At the commencement of the eighteenth century, the Siberian salt-ships might still be loaded with 130,000 or 140,000 poods of that article, and so be brought to Nishney-Novgorod : at present they can take in no more than from 70,000 to 90,000 pood. In fish it is extremely plentiful, especially in sterlet, sturgeon, biela reba, &c. — The Volga, in its extensive course takes in a great number of rivers and brooks ; the principal of which are :

1. The KAMMA. It is the largest of all the rivers that unite their streams with the Volga, and at its mouth is to the full as large as it. The Kamma rises in the government of Perme, from the western projections of the Ural-chain, nearly in the same region with it, waters a small part of the government of Viatka, flows through a large tract of the government of Perme, forms the border between the governments of Viatka and Ufa ; and, at Laishewa, sixty versts below Kazan, falls into the Volga. In its course it runs over a space of a thousand versts. By the Tartars it is called Tsholman-Idel. For the transport of salt and iron from Siberia, it is one of the most important rivers of the empire. This is chiefly effected by the Tchussovaiya and the Belaiya, two rivers of considerable magnitude, flowing into it on the left. Beside these, the Kamma takes up a great number of other rivers, such as, on the left, the Kolva, the Yaiva, the Kosva, and the Ik ; on the right, the Obva,

Obva, the Okhan, and the Umyak. The Kamma, above the mouth of the Belaiya (which is of a whitish water,) has a blackish wholesome water. It is mostly attended by a ridge of mountains, consisting of sand, gypsum, and marl, with forests of firs and oaks. It is tolerably well stored with fish; and they are reckoned better tasted than those of the Volga.

2. The OKKA. This arises in the government of Orel, irrigating that, and the governments of Kaluga, Tula, Mosco, Rezan, Tambof, Vladimir, and Nishney-Novgorod, then falls, at the city of the last mentioned name, into the Volga. It is a very considerable river, navigable to its upper regions, takes up a multitude of smaller streams, and thus effects an excellent communication between most of the inland governments of the empire. It receives, on its left, the Ugra, the Moskva, and the Kliasma; and on its right, the Upa, the Osetr, and the Moksha.

The TEREK. It originates in the caucasian mountains, runs at first towards the west and south, but turns afterwards entirely to the east; and, in about 44 degrees north latitude, and 65 longitude, falls into the Caspian. Together with a great number of little mountain-brooks, it takes up, among others, the Bakfan, the Malka, and the Soonsha. — Its source lies properly in the snow-mountains of Caucasus, on the highest partition-ridges of the frontiers of Georgia. Its course is rapid;

rapid; and, in the months of July and August, when the melted snows rush down in torrents from the mountains into the plain beneath, swells to the height of eight or ten feet above its usual level in autumn, winter, and spring. It then overflows its banks in many places, and lays the adjacent country under water; making itself in different parts new beds, and choaking up the old with sand. In its inferior course, as far as Kitzliar, it is almost entirely unaccompanied by woods; farther up, to Starogladka, by a few; and thence upwards, its banks are richly garnished with forests, particularly of oaks, wild-fruit trees, and a variety of others. It does not freeze over every year, though in winter it is full of driving ice. In this season its water is tolerably clear, which, at other times, above Kitzliar, is turbid with earthy particles; but, when taken up, it soon grows clear, and is then bright, well-tasted, and of good quality. Below Kitzliar, the river has a far less fall, and divides into several arms, in which the parted stream so gently flows, that it has time to depose its earthy particles, whereby these arms are alternately filling up; so that now one, and then another, represents the main river. In the lower regions, on the shores of the Terek, are seen vineyards, mulberry, and other fruit-trees, to which succeed salt-lakes, and springs of the same nature. Its bed is mostly of sand and clay. In fish, the Terek, as well as all its collateral rivers, is poor.

Yet

Yet there are caught in it sturgeon *, beluga †, fevruga ‡, salmon in plenty, fat-fish §, carp, barbel ||, shad, pike, sudak δ, pearch θ, leschtsc ξ, hfish-otters, beavers, tortoises, &c.

Rivers that fall into the Euxine.

The KUBAN, or the HYPANIS of the antients. It rises in the caucasian mountains, and is formed by the confluence of a number of small rivers. With the river Tumefek it makes several islands between the Palus Mæotis and the Euxine, of which one of the finest is the isle of Taman; a principal arm of it falls northward into the former, and the other southward into the Euxine. The river in general, and the first arm in particular, has a rapid course and clear water. But that arm which falls into the Euxine, flows in a very gentle current, has a troubled water, and forms at its mouth a pretty spacious bay, which however is so shallow that it can never serve as a haven. On the other hand the isle of Taman has an excellent haven at Phanagoria. The Kuban has neither rocks nor water-falls, and therefore is well adapted to navigation with vessels that do not draw much water. It admits to the right, the rivers Barakla and

* Acipenser sturio.	† Acipenser huso.	‡ Acipenser
stellatus, PALL.	§ Cyprinus chalcoides.	Cyprinus
barbus.	δ Lucio perca.	θ Perca fluviatilis.
ξ Cyprinus barba.		

Barfukta;

Barfukta ; and to the left, the Yaffik, the Yaffi, the Urp, the Sagraffa, the Laba, the Karabokan, and feveral other fmall rivers that flow into it from the mountains. In the mountainous part of the country watered by it, its banks are very fteep ; but in the lower regions they are flat, where the country is one continued fteppe, almoft entirely deftitute of wood, but in other refpects fertile enough. The ifle of Taman particularly poffeffes an excellent, and in fome diftricts an ever-verdant foil. The mountains in the fuperior regions of the Kuban are thickly ftrewn with forests. In its neighbourhood alfo, namely at Atfhuel, is a fine lake of falt water.

The Don, or, as it was called by the antients, the TANAI, is the fecond chief river which falls into the Palus Mæotis, and by it into the Euxine. It originates in the government of Rezan, from the Ivanofskoe lake, and, after a courfe of about a thoufand verfts, falls into the fea near Azof. It flows for the moft part over a flat country, covered with flowers and forests. The forests, confifting moftly of pines and oaks, accompany it quite to the circaffian mountains. Its bed has neither rocks nor large ftones, but is formed generally of fand, marl, and lime ; for which reafon it flows very gently, and here and there has broad fand-banks and fmall iflands. It is liable to violent inundations. Its water is turbid and whitifh ; and is faid to be not wholefome to every conftitution. It indeed
abounds

abounds in fish ; yet in this regard is not to be compared with the Volga. Below Voronetch the Don commonly freezes about November ; and February has scarce begun before the ice goes off. This river is, therefore, from its magnitude and other qualities, of the utmost importance to the trade of these parts ; it flows through the governments of Rezan, Tambof, Voronetz, and Ekatarinoflaf. Among the principal rivers taken up by the Don, are : the Voronetz, the Khoper, the Donetz, and the Manitsh.

1. Of these the DONETZ is the most considerable. It takes its rise in the government of Kursk, flowing as far as Caucasus through a fertile and very populous country. It is navigable from the Isum, and has nearly the same water and the same kinds of fish with the Don.

2. The VORONETZ has its origin in the government of Tambof ; in a fruitful region furnished with beautiful forests of oak. Its banks are well inhabited, and copiously strewn with towns and villages. By means of a canal that unites two petty rivers that run into the Voronetz and the Okka, one may sail in small barks from the Voronetz into the Okka, so that the Volga is thus in a manner connected with the Don ; but, not to mention that this passage can only be effected in little barks, the vast circuitous way that must be taken up the Volga, in order to come into the Don, defeats the benefit that might otherwise be derived from it. — Not far
below

below the city of Voronetch, we see the dock-yards at Tavrof on the Don established by Peter I. in the year 1708, where large ships are constructed for the navigation of the Euxine.

The DNEPR, or the BORYSTHENES of the ancient geographers, arises in the government of Smolensk, not far from the district where the Duna and the Volga take their source. This large river directs its course southwards to the Euxine; and, after having formed the Liman, a marshy lake about sixty versts in length and ten in breadth, falls into the Euxine near Otchakof and Kinburn. Besides traversing the government of Smolensk, it runs through the provinces of Mohilef, Tchernigof, Kief, and Ekatarinoslaf, and forms the boundary between three of them and Poland. The Dniepr pursues a course of about fifteen hundred versts, chiefly through the most fertile provinces and the most genial climates of the empire. At Smolensk it usually freezes in November, at Krementshuk in December, and at Kief in January; and in the last-mentioned region, breaks up about the beginning of March. It is broader, deeper, and more rapid than the Don; has a number of islands, a bed partly sandy and stony, and partly of marl; and, though a calcareous, yet a salubrious water. At Kief there is a large bridge of boats thrown over it, of 3,583 feet two inches of France, or about seven hundred russian sajenes or fathoms in length, and in many places has very commodious ferries. To
the

the above-mentioned city, from Smolensk, it is navigable in perfect safety ; but below it, at a distance of sixty versts from the influx of the Sura, down to Alexandroffskaia, are thirteen cataracts in regular succession, which are caused by a multitude of banks and blocks of granite projecting into the river ; nevertheless, at very high water, it may be navigated with empty barks, above it, the cargoes whereof must be shipped again in other vessels at seventy versts still lower down. From these waterfalls to its mouth, the distance is about four hundred versts, where it may be passed in all parts without the smallest danger. Its mouth is in many places deep enough, and might be made commodious for shipping. As far as Kief it is accompanied by thick forests ; but below that city, its shores are mostly bare, or, especially in the upper regions, beset with hills and mountains. Lastly, the Dniepr yields plenty of fish, particularly from its mouth, to Kherson, and farther up. The Sosh, the Desna, the Soola, the Pfiol, the Vorokla, the Sammara, the Inguletz, and several other waters, flow into it.

The BOGUE. It rises in Poland, parting that kingdom and a portion of European Turkey from Russia ; and, at Otchakof, falls into the Euxine. Among others, it takes up the Ingul, the Sinucha, and the Guiloi ; and thus becomes a very considerable river.

Mineral

Mineral waters.

It is indeed surprising that in this vast empire so proportionably few mineral springs should have been hitherto found, if we except the salt-sources and lakes, which do not belong to this place. In mineral substances there is certainly no deficiency in many parts; it must therefore arise from some other cause. Perhaps the great distance from the sea. Hence it may likewise be, that in the inland parts of the country every trace of the old volcanos, that doubtless existed here some thousand years ago, is effaced.—The mineral waters at present known, and occasionally applied to medicinal use, are:

1. *Sulphureous * and liver-of-sulphur † waters.*

(Hot springs.)

These are the most numerous. Some are of lukewarm, others warm, and a few of hot water, viz.

1. A fetid sulphureous spring is in Sarepta on the Volga, in the bed of the mill-pond, and another near Saratof.

2. Another is near Selo Klintschy in the government of Perme.

* Sulphur-springs, which usually afford hepatic air or sulphurated hydrogen gas.

† Liver-of-sulphur springs; i. e. springs which are impregnated with sulphurate: they also afford hepatic air or sulphurated hydrogen gas.

3. The like fetid water and mud are contained in many of the bitter lakes and other waters in Siberia ; for instance, the lakes Karaulnoë and Gorkoë on the lines of Ischim, the Pustoy on the Kurta-mysh, and the stream Oscha on the Baraba, which emits a great quantity of inflammable air.

4. The baths on the Terek in the caucasean government. These on being discovered to Peter the great, were examined by his order in 1717 by Dr. Schober, but have been thoroughly explored only of late by the academician Guldenstædt. The principal of these is the St. Peter's bath, formerly called the Baragunschian ; and next to this are the St. Catharine's, the St. Paul's, and the St. Mary's baths. The mountains whence they issue consist of sandstone and whetstone. St. Peter's bath is formed by three several sources pretty distant from each other. Their proper heat is 71 degrees of Reaumur's thermometer, let the temperature of the atmosphere be as it may. The warmth of the other sources rises from 41 to 60 degrees. All these waters, even the cold ones, are clear as crystal. In taste and smell they resemble liver of sulphur, which however they entirely lose in twenty-four hours. M. Falk thinks their component parts, in a pound, consist of 12 ounces and about 3 grains of Glauber's salt, three grains of calcareous earth, very little sulphur dissolved in mineral alkali, no iron, little æther, and a trace of alum : according to
Gul.

Guldenstädt, however, this water contains nothing more than sulphur and alkaline salt, which, mixed, produce liver of sulphur, no iron, but a considerable proportion of calcareous earth.—Besides these, there are other warm springs in these parts, as: the warm baths on the river Koyssa, near Kitzliar, called St. Andrew's baths, and likewise proceed from sandstone; and the warm springs on the Podkumka, thirty versts from the fort of St. George, issuing from mount Maschuka. Their component parts are the same with the foregoing, only their warmth is perceptibly less. In regard to the medicinal virtues of these baths, it is asserted that their internal use is very beneficial, in the swelled neck or other scrofulous indurations of that kind, stricture of the breast, phthisis, arising from glandular obstructions, in obstructions of the liver, in the jaundice, in hypochondriacal affections, hæmorrhoids proceeding from obstructions in the bowels; in fine, to persons who labour under a shortness of breath from indurations or calculous substances or mucus in the lungs. The internal and external use of them is said to be good in gravelly complaints attended with pains in the back and loins, and disorders arising from a checked perspiration; in short, in all arthritic and rheumatic diseases. The inward, but still more the outward use of these baths are reckoned serviceable in distempers caused by an obstinate acrimony of the blood, in scorbutic and cutaneous eruptions.

Bathing in them is prescribed against stiffness of the joints, and contractions of the limbs, &c. The inward and outward use of them is also profitable in tonic and convulsive spasms, as also in rickety complaints. This water cooled is found greatly to promote a discharge of urine. Taken daily with milk it is extremely beneficial in consumptions.—Guldenstædt, in the years 1771 and 1773 cured forty patients by means of these baths, and since that time the use of them is become pretty general in the country round.—In the basins of these warm waters there is a deposition of tophus and a small portion of native sulphur. In the vicinity of them are naphtha sources*.

5. The baths on the Bargusin, in the province of Nertschinsk in the government of Irkutsk. They were found in a waste region at the distance of eighty versts from any habitations. But M. Grund, surgeon to a regiment quartered in those parts, having successively prescribed the use of these baths to several patients; M. von Klitschka, the governor of Irkutsk, in 1779 caused some buildings to be erected there. They have proved of great advantage to persons afflicted with rheumatism, scurvy, phthisis, and other complaints of a like nature. The water is drank either pure, on

* For a more circumstantial account of these waters see Falk, Beytrage, book ii. p. 13. & sqq. and Guldenstædt in hist. cal. 1778, and Petersb. Journ. book ii. p. 134.

account of its nauseous taste, resembling that of rotten eggs, mixed with milk. It promotes perspiration, does not quench the thirst, and may be drank in large portions. When boiled it is of a very agreeable taste, and is particularly good with tea *.

6. The warm springs in what was formerly the Soongarèy. Some of these are near the russian borders. There are several of them, as, 1. on the Arafchan, which river proceeds from the mountains, and falls into the lake Alakta; the spring gushes from sandstone. 2. On the mountain stream Yab-lifchu, which flows into the Emil. 3. On the rivulet Lepschy gliding from the mountains of Musart, into the Tzuy; and, 4. high up the Irtysh, which was frequently visited by the late khan Kontaisch †.

7. The warm springs in the russian part of the Altay-mountains. There are but very few of them: the most considerable are about the head of the Abakha. They have not, however, yet been examined.

8. The warm springs in the Sayane-mountains. I have heard of some in those parts; but know nothing more of them.

9. The warm springs in the Baikal-mountains. They are for the most part highly sulphureous, and

* St Petersburg. Journal, 1779, book ii. p. 376.

† See Falk, Beytrage, book ii. p. 16.

the water of some of them is very hot, which in cutaneous disorders is used with good effect *.

10. The warm springs at Kamtschatka, and on the kurilly and aleutan islands, which have been spoken of before.

11. The sulphureous springs on the Sok and on the Volga; for which the reader is referred back to the description of the Ural-mountains.

2. *Vitriolic waters.*

(Sour-springs.)

Strong martial waters are not uncommon; but, of proper sour waters which are applied to medicinal purposes, only the following are known:

1. St. Peter's well in the district of Olonetz, in the village of Buigova, where it trickles in a valley. It was fitted up in 1716 by Peter the great, as well for his own use as that of the public, for which purpose several buildings are constructed about it, together with a church. The water has a vitriolic, inky taste, and a sulphureous smell. The well is four arshines in depth, and $3\frac{1}{2}$ in diameter, sunk in a hollow full of roots of trees and weeds, (partly in their primitive state, partly impregnated with ferruginous matter, or entirely converted into iron-stone,) interspersed with stones, and $1\frac{1}{2}$ arshines in a clayey kind of stone with much sulphur pyrites. In the

* Georgi's travels, tom. i. p. 79. 93, &c.

deeper

deeper parts of this vale is a stratum of vitriolic earth, from which vitriol is here prepared *. This well has for many years past grown almost entirely out of use.

2. The well near Tzaritzin; at Sarepta in the government of Saratof. This is at present the most famous in the russian empire, and the only one that may be said to be frequented. It was discovered in 1775, by Dr. Vier †, pastor of the community of moravian brethren at Sarepta. In a circuit of two hundred versts, no less than thirty-two mineral springs have since been found. The largest and most copious lies nine versts to the north-west of Sarepta, eighteen versts from the town of Tzaritzin, and three versts from the bank of the Volga, in 48 degrees 43 minutes north latitude. The country round is very pleasant, abounding in odoriferous herbs, in pure and pellucid sources, in all kinds of fish, cattle, game, poultry, &c. Dr. Vier caused this spring to be inclosed, and at first prepared spring-salts and magnesia from the running water. The component parts are, in twelve ounces: thirty-two grains of bitter salt, $2\frac{1}{2}$ grains of selenite, the same quantity of calcareous earth, and a strong tincture of iron, with but little æther. The main

* A like mineral water, where the vitriol spontaneously arising may be collected in poods at a time, lies at the distance of seventeen versts from Zurukhaitu in Daouria. Pallas, travels, iii. 425.

† As is generally supposed; but these springs had been before observed by Messrs. Falk and Pallas.

spring is inclosed seven feet high and four over. The water is commonly from three to four degrees of Reaumur warmer than common water. The taste is not unpleasant, clean, and rather saline. Near the well the air is somewhat cooler. The following properties are ascribed to these springs: they promote the circulation of the juices, preserve from putrefaction, brace and cheer, cleanse the fluids from acrimony; and are good for wounds. The water is also an excellent laxative, promotes perspiration, purifies the blood, abates inflammations of it, cures cramps and obstinate colds. It has been computed that every hour thirty-six thousand pounds of water flow from this spring, containing a hundred and eighty pounds of mineral particles; in the whole year therefore 315,360,000 pounds of water and 1,576,800 pounds of mineral parts. In the year 1780, the persons that used these waters, amounted to a hundred and twenty-two, and the number of the frequenters has been annually much increasing ever since *.

3. A very good four-spring is also at the St. Peter's bath on the Terek. It arises quite close to the hot-spring, and contains principally Glauber's salts, with a slight ferruginous tincture, and a smack of a volatile poignant acid †.

* For farther particulars, see St. Petersburg. Journ. parts ii. vi. and New Pet. Journ. 1782, book ii. p. 139.

† Falk, Beytr. book ii. sect. 12.

4. The springs near Ekatarinenburg in the government of Perme. They are just two versts from the town, in the iron works of Verchney-Isetsk. Their component parts are a solution of iron by the atmospheric acid and some selenite; the taste is very inky, and the effect detergent and decomposing. The well has been lately made, and the waters are coming into general use.

5. A similar source is likewise at the iron works of Kuschvinsk in the same government. It has the same qualities with the last mentioned, and is used in the hospital of the place with benefit.

6. A four-spring near Pogromna in Daouria, which greatly resembles Seltzer water*.

7. Another of these four-springs is also in the iron-works at Kutomarsk in Daouria†.

3. *Bituminous waters.*

(Naphtha sources.)

1. On the stream Igar, fifteen versts from Sergiefsk on the Samara, and others forty versts from it. They yield considerable quantities of naphtha.

2. On the Terek, in the mountains about the warm springs at Baragun, near Deulet-Gueray, &c. and the sources of Tschetschengisk are particularly prolific. There arises out of holes in the argillaceous and sandstone soil a watery vapour smelling of

* Pallas, travels, part iii. p. 249.

† Georgi, part i. p. 344.

naphtha,

Pallas

naphtha, which collected in pitchers is so richly impregnated with naphtha, but still more with maltha, that the inhabitants take both and use the latter as tar. The earth hereabouts is all impregnated and black with maltha.

3. On the shore of the Volga near Tetyuschy and near Samarskoy, thick naphtha oozes out of the stony stratum.

4. On the mountain Irnek, on the kirghisian and khivinschian frontiers, on the road to Ornburg black naphtha flows. A lake on the Sagris which falls into the Emba, is covered for a finger thick with naphtha.

5. On the Sok*.

6. On the Caspian; principally near Baku.

7. In Taurida. In the district of Perekop and on the isle of Taman, twenty versts south of the town of that name; also at Yenikaly and in the Kuban.

8. On the Baikal; in various places.

4. *Incrustaceous waters.*

1. Which depose tophus calcareus, or foreign substances incrustated with calcareous particles, and also form stalactites. This kind of water is in great plenty, of which the tophus strata on the Volga, the Kamma, the Terek, the streams of the upper Sura, &c. and the many stalactites in the caverns of the

* For which see before in the description of the Ural-mountains.

Ural, the Altay, and other mountains are so many proofs; also a petrifying spring to the right of the Volga near Duvobka, which in thirty years strongly impregnated a piece of timber with calcareous particles *.

2. Such as incrustate substances laid in them with iron-ochre, or convert them entirely into iron-ore. Neither are these uncommon, for instance, the above-mentioned four springs at Olonetz, a spring near Verchneturinskoy-favod, one near Sufunskoy-favod, and one in the region of the Schlangenberg †.

Canals.

The construction of canals was a principal object with Peter the great: some were even begun by his orders, but were afterwards left unfinished from the difficulties that arose in the progress of the work. Four particularly derive their origin from him, viz.

1. that to Cronstadt, which, after being carried upwards of two versts, was then abandoned.
2. The Ladoga canal, which in length is a hundred and four versts, and seventy fathom in breadth.
3. A canal, along which, by means of some rivers, a communication is formed between Mosco and the Don.
4. That at Vishnei-Volotshok, by means of which a passage is had from the Caspian into the Volga; and thence, in conjunction with some rivers and lakes, into the Neva, and so into the Baltic.

* Falk, ubi supra, p. 5.

† Hermann's Statistische schilderung von Russland, &c.

The late empress, from the very beginning of her reign, bestowed a peculiar attention to this important object, and actually caused three canals to be dug, besides those of Cronstadt and St. Petersburg; in order particularly to render far more commodious the passage from the Caspian into the Baltic than it is by the canals of Vishnei-Volotshok; and then, by means of some rivers, to connect the Caspian with the White-sea. Several other plans have been proposed; and, among them, one to unite the Dniestr, the Dniepr, and the Volga.

Many other canals might be undertaken, for connecting rivers of various magnitudes together, which would greatly facilitate the transport of products from one place to another, especially to the sea-ports. Only in some regions the expence would be too great; or the disadvantage, at least to them, would be beyond all proportion greater than the benefit to accrue from them. However, many canals might be cut highly favourable to trade where it has hitherto met with numberless impediments.

For instance, not more than two voloks * are to be met with between the Don and the Volga. One is at Tzaritzin, where Peter the great had formed the design of making a canal of communication between these two rivers. The other volok is beyond Tscherdine, between the Kolva and the Petshora.

* A volok, in the Russian language, signifies a small tract of land between any two rivers that run nearly in a parallel direction.

Almost all the rivers of Siberia disembogue into the Frozen-ocean. Not one of all that take their rise in Siberia, runs to the countries of the Mongoles, Bukharians, Kalmuks, and Tartars ; whereas, many of those which rise in the Mongolèy, and the country of the Kalmuks, flow northward through Siberia. They are so commodious for navigation, that a vessel might go from them through Petersburg to Selenghinsk, were it not only for two voloks : one between the river Tschuffovaia and the Taghil, and the other between the Ket and the Yenissey ; the latter of about ninety versts, and the former not so wide.

V I E W
OF THE
RUSSIAN EMPIRE.

B O O K II.

**HISTORICAL VIEW OF THE NATIONS OF THE
RUSSIAN EMPIRE.**

IN addition to the advantages derived from the natural situation of Russia, Nature has been no less bountiful to her in the inexhaustible sources of her products of every species. As a systematical survey of them would lead us beyond the bounds of our plan ; and, even with the most studied brevity, would only be a dry nomenclature, we shall here content ourselves with remarking in general : that the russian empire produces all the necessaries of life, and many of them in such superfluity, that, with a proportionate population and industry, she might be not only completely independent in regard to her primary requisites, but also entertain the probable hope of
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keeping the generality of trading nations in a constant dependence on her. The profit, employment, and manufacture of these natural stores by mechanical arts and traffic will be expressly noticed in the progress of this work; we therefore pass by these objects now, in order to give a completer knowledge of them, by first briefly delineating the political distribution of the empire.

The whole russian territory at present consists of FIFTY alike-organized provinces, which are called governments or viceroyalties. As in this distribution less regard was had to the superficial contents than to the population, so the areal dimensions of the governments are generally various; while their population, with a few exceptions, is pretty equal. Each government is again divided into several circles; some of the largest have also a farther distribution into districts. In each circle is a circle-town, where the circle-administration has its seat, and one of these circle-towns is at the same time the government-town, in which the governor-general and the principal officers reside, and by which the whole government is usually denominated.

Besides these fifty governments, belonging to the russian empire, are two more countries, having a military-civil constitution, namely, the country of the Donskoy-Kozaks, and the country of the Euxine-Kozaks. Two-and-fifty provinces therefore, properly speaking, compose the russian empire; the georgian states Karduelia and Kakhetty, several petty

petty districts of people, in the parts of Caucasus, with the country of the Kirghis-Kozaks, are to be reckoned among the countries under the protection and in the dependence of Russia.

Great part of the country now called Russia was, in periods of remote antiquity, inhabited towards the north-east and north, by a people of Finnish origin, perhaps descended from the antient Scythians. Towards the north-west, were tribes consisting of a motley race of Sauromates and grecian colonists; and from them are descended the modern Lithuanians, Lettovians, Livonians, and Courlanders; as were also the antient Prussians. The whole southern part of Russia, even to the Krimea, was for some time inhabited by Goths; and, between the Volga, the Don, and Mount Caucasus, dwelled a nation descended from the Medes, called Sauromates, that is, the northern Medes. In process of time, when nations of barbarians issued, one after the other, in swarms, from the east, and some of the different tribes of Goths had, since the middle of the third century, penetrated into the western regions of the Roman empire; part of the Sauromates found themselves under the necessity of retiring farther toward the north and the west. Even at that early period they had the same political constitution we still see prevalent among them. Each individual of the nation was either master or slave. Those who were of distinction among them, called themselves tribes, *slaf*, and *slavnè*, or noblemen; whence again,

all such as either were renowned for great achievements, or only capable of performing them, were afterwards in like manner styled *flavnè*. Under this denomination it was that they became known to the Europeans, who were not till very lately acquainted with the particular tribes of those nations. These tribes had their appellation frequently from some river, town, or district. So the Polabes were named after the Laba, or Elbe; *po*, in the flavonian and russian tongues, signifying near. The Pomeranians dwelt *po moru*, or near the sea. The Havelanians near the river Havel; the Maroaro, or Moravians, or Marahani, on the banks of the river Morava. The Varnabi had once their residence near the Varnof, and the Polotzani on the shores of the Polota. In the mountains * lived the Khrobates; the Tollenfians were named after the river Tollenfea, in Pomerania citerior, which empties itself into the Peene, near Demmin. From Sidin, or Sedin, the Stettin of the moderns, one tribe was named Sidi-nians; another from Britzen† Britzanians; from Kuffin, a town subsisting in those early times, the Kiffinians took their name, the traces of whom are still to be found in a village near Rostock, called Kessen, or Kiffin: and lastly the Lutitzians were named after Loitz, on the river Peine. But there are also some names of these tribes which are original; for example, the Sorbs, or Serbs, the

* Khrebet.

† Treunbritzen.

Tschechs or Bohemians, the Lachs, Lechs, or Polachs, the Poles; and from the more modern Varagian Rossi, the Russians, about the year 862, received their name. The storm, which, in the train of Attila, from the year 435 to 456, spread terror and devastation over the earth, was but of short duration. In the mean time came the turkish tribes, which till then had dwelt in great Turkey*, and Turkistan (where is still subsisting, on the banks of the Taras, the town of Turkistan) and established new empires. The empire of the Vlagi, or Volochi, or Vologars, or Volgars, or Bulgarians, is in like manner called Great Bulgaria. It is situated beyond the Volga, on the banks of the Kamma, of the Bielaia and the Samara: The empire of Borkah or Ardu, of the asconian Turks, extended on this side of the Volga from Uvieck, near Saratof, quite to mount Caucasus. One part of these were called Kumani or Komani, from the river Kuma, and their town was named Kumager†.

* i. e. Bukharia the less.

† For more on this subject, see the History of Discoveries made in the North, translated from the German of Dr. John Reinhold Forster.

SECTION I.

Slavonians.

No other country throughout the globe contains such a mixture and diversity of inhabitants. Russians and Tartars, Germans and Mongoles, Finns and Tonguses, live here at immense distances, and in the most different climates, as fellow-citizens of one state, amalgamated by their political constitution, but by bodily frame, language, religion, manners, and mode of life, diversified to the most extraordinary contrasts. It is true, there are some European countries in which we find more than one nation living under the same civil constitution, or where we still perceive evident traces of the former difference between the primitive and modern inhabitants; but in almost all these countries the dominant nation has in a manner swallowed up the conquered people; and the individuality of the latter has, in the course of some centuries, by insensible degrees, been almost entirely lost. Whereas in Russia dwell not only some, but a whole multitude of distinct nations; each of them having its own language, though in some cases debased and corrupted, yet generally sufficient for generic classification; each retaining its religion and manners, though political regulations and a more extensive commerce produce in some a greater uniformity; the generality of the
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main stems, in short, bearing in their bodily structure, and in the features of their faces, the distinctive impression of their descent, which neither time nor commixture with other nations have been able entirely to efface.

This extraordinary variety of inhabitants, while it gives great attraction to the study of russian statistics, adds likewise to its difficulties. Instructive and interesting as it is to the reflecting observer, to trace the human being through every degree of civilization, in the several classes of manners, and in all the forms of civil society; yet toilsome and dry is the occupation which must necessarily precede that satisfaction: to investigate the origin of these stems in their first shoots, and to discriminate their gradual progress to larger societies and states from the chaos of dark and fabulous times. The united efforts of the numerous inquisitive historians, both foreign and domestic, who have employed themselves on these subjects, have hitherto been able to cast but a feeble light on the origin of the greater part of the nations of the russian empire, and the researches of many of them have been lost in traditions, the romantic obscurity whereof has left us no hope of arriving at the truth. Without pretending to surmount these difficulties, on which historical sagacity has hitherto been exerted without any remarkable benefit to the knowledge of nations, and the discussion of which would lead us too far beyond the

bounds we have marked out to our plan, we will merely attempt to arrange the particular results of the most competent inquirers into a consistent line which may guide us through the labyrinth of the intricate reports of the middle ages, and convey us into the more luminous regions of authentic history. — We will trace the existence of each nation which we find within the limits of the russian territory to its first historical appearance; and these efforts will enable us to sketch out a genealogical system of the nations that inhabit that empire. Where history leaves us, we will seek in the analogy of languages means for the classification of collateral tribes, hoping thus to deduce as complete and regular a view as possible of all the nations of the russian north, according to their real or probable derivation, their most remarkable events and catastrophes, their population and the place of their present abode*.

Besides

* For the most established and the most memorable facts from the antient history of the russian nations, it is proper here at setting out to note the authorities which are chiefly used. These are, besides several scattered essays in larger works or periodical publications, principally the following: Plan of a topographical and physical description of the russian empire, undertaken by the imperial academy of sciences; in the St. Petersburg Journal, vol. vi. p. 323. Georgi's description of all the nations of the russian empire. Schlœtzer's general history of the north, or the 31st vol. of the german universal history. Pieces relating to russian history, by her majesty the empress Catharine II. Schlœtzer's

Besides the Slavonians, to whom the predominant nation belongs, there are in the russian empire three main national stems, whose original identity is historically placed beyond all doubt, and among whom several other tribes are to be counted as relative or collateral branches, namely, Finns, Mongoles, and Tartars. To these may be added the Tunguses; who, though not a primitive stock, yet are the only one of their race in Russia. A sixth class is formed by those nations, with whose language and history we are still too much unacquainted for being able with any degree of certainty to assign them a place in the national system at large; and this classification is terminated by the dispersed multitudes of european and asiatic nations who have settled here and there in particular provinces; either as conquerors with

Schlœtzer's dissertations on the russian annals (1). Dissertation sur les anciens Russes, par Strube de Pyrmont. Kratkoie vedeniye v bytopissaniye vsereff. imp (2). Thunmann's unterfuchungen ueber die alte geschichte einiger nordischen vœlker. Yannaus pragmatifche geschichte von Liefland und Ehstland. Muller's sammlung russischer geschichte. Gatterer's versuch einer allgemeinen Weltgeschichte. Thunmann's unterfuchungen ueber die geschichte der æstlichen europæischen vœlker. Peyssonel's verfassung des handels auf dem schwartzen meer. Pallas sammlung historischer nachrichten ueber die mongolischen vœlkerschaften. Fischer's sibirische geschichte. The travels of the St. Petersburg-academicians, &c.

(1) Translated in the Selections from foreign journals, &c. printed for Debrett, 1797, vol. ii. p. 293 & seq.

(2) By professor Besack.

violence, or voluntarily and on invitation as colonists: but their number is too inconsiderable for having any pretensions to be treated of under a separate head.

I. The SLAVONIAN stock is one of the most remarkable and most widely extended in the world. Next to the Arabians, who formerly prevailed from Malacca to Lisbon, there is no people throughout the globe that has diffused its language, its dominion and its colonies to so surprising an extent. From the shores of the Adriatic northwards as far as the coast of the Frozen-ocean, and from the shores of the Baltic through the whole length of Europe and Asia, as far as America and to the neighbourhood of Japan, we everywhere meet with slavonian nations, either dominant or dominated. — The origin of this numerous and powerful race is lost in the night of antiquity; it was perhaps comprised by the Greeks and Romans under the comprehensive and indefinite denomination of Scythians and Sarmates*.

* In the year 495, the Heruli, being routed by the Longobards, marched through the territories of the Sclavi; and this is the first event in which this nation is mentioned in history under that name. Indeed the name Sclavi appears in the armenian historian Moses of Chorena, who is commonly thought to have lived in the middle of the fifth century, and in the epitomiser of Strabo; probably also in Ptolemy: but the passages of these historians that relate to our subject deserve a more accurate investigation. — Jornandes and Procopius, two contemporary historians of the sixth century, are the first by whom they are distinctly named. *Schlätzer.*

Poland,

Poland, Prussia, Lithuania, and the southern parts of Russia were probably the antient seat of the Slavi. Hence they spread themselves to Dacia, to Germany, and to the countries lying beyond the Danube; these regions were the cradle of those countless swarms which over-ran the half of Europe and Asia, or reduced themselves to subjection.

Towards the middle of the fourth century all the flavonian races were subdued by Ermanarik, and incorporated with the Ostrogoths into one government. Soon afterwards both the dominant Ostrogoths and the servile Slavi were rendered subject to the victorious Huns. A century had scarcely elapsed when these disturbers of the world were either exterminated on the one hand by the gothic Gepidi, or on the other driven to the farther side of the Danube by the finnish Ungres and Bulgarians. The Slavi began to shew themselves in Dacia, pressed between the Ungres and the Gepidi, and took up a part of the northern shore of the Danube. Here we find them entering as a peculiar people, among the barbarians who menaced from the north the downfall of the declining roman empire * ; hence they plundered the roman
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* In order not to leave the curiosity of some readers entirely ungratified, we will here observe, that the Slavi on the Danube, during a course of several centuries played no insignificant part among the barbarians, who, by their predatory incursions accelerated the downfall of the grecian empire. Their first attacks were made in the time of Justinian I. about the year 527, but

provinces ; hence they rushed like a torrent on the country of the Gepidi, who were almost entirely extirpated by the Longobards and Avari. The Avari arrogated to themselves a sort of sovereignty over the various flavonian races, and occasionally extorted from them a tribute ; but this people too was at length swallowed up by the Bulgarians, who now, by these accessions of people, extended themselves over all Dacia. Forced by their oppressions, the greater part of the dacian Slavi abandoned their dwellings, and retreated (probably about the middle of the seventh century) from the Danube to the north. Some tribes withdrew to Poland, others to Russia, and a part of them remained on the Danube.

Thus were these countries peopled by flavonian colonies ; who, ever spreading farther and wider, and founding governments in every place, occasioned the most signal revolutions in the north of Europe. All the branches of this grand stock, who have

but they returned, not long afterwards, to their seats on the northern side of the Danube, and, not till towards the year 602, began to settle on the southern side of that river. — A complete history of the danubian Slavi, from the year 495 to 1222, is given by Mr. Stritter of Mosco, from the byzantine writers, in his celebrated work : *Memoriæ populorum, olim ad Danubium, pontum euxinum, paludem mæotidem, Caucasum, mare caspium, et inde magis ad septentriones incolentium, e scriptoribus Historiæ Byzantinæ erutæ & digestæ*. Whoever finds these particulars too dry for his perusal, may read an entertaining account of the Slavonians of those times and their intercourse with the state of Rome, in the immortal work of Mr. Gibbon.

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formed peculiar states, may be ranged by their present condition in seven classes, that is, into russian, polish, bohemian, german, illyrian, hungarian, and turkish Slavonians. Three of these branches we find in the spacious territory of the modern russian empire: the Russians, the Poles, and the Servians.

1. The aborigenes of Russia were of two races: FINNS and SLAVONIANS. The former possessed the regions of the Volga and the Duna; the latter dwelt about the Dniepr and the upper Don. The main seats of the Slavonians were properly in Lithuania and Poland; only one arm of that body extended over the Dniepr. When the danubian Slavi, being cruelly oppressed by the Bulgarians, fell back to the north, they spread themselves farther on the Dniepr, where they constructed Kief. One colony of these Slavonians penetrated up the Volkhof and laid the foundations of Novgorod. After a dark period of more than a hundred years, this latter race again appear amidst the finnish nations, and at this point of time it was that the russian state received its origin from the Scandinavians or Northmanni.

Shortly after the settlement of both these Slavonian races on the Volkhof and the Dniepr two hostile nations arose and became their oppressors: the Khazares from the Euxine, and the Varagians,
Varin.

Varingians or Northmanni * from the Baltic. Under various turns of fortune, of which but little is known with certainty, both races obtained their

* As the Varagians had so considerable a share in founding the russian state, it will perhaps be not unacceptable to find here a compendious view of their pedigree and fortunes. The Norrmanni, who in russia were called Varagians or Varingians, were a northern people of gothic descent, a warlike multitude, composed of Danes, Swedes, Norwegians, who, perpetually in quest of adventures, established governments in the western and eastern parts of Europe, and produced revolutions, especially in the south, the consequences whereof extended throughout our quarter of the globe. The first trace of their maritime expeditions is discoverable about the year 516; though it is probable that they carried on their piracies much earlier, and were generally comprehended under the name of Franks, who already appear under the emperor Probus as enterprising mariners. In the year 795, they are first perceived in Ireland. About the year 813, they began their incursions by the Elbe, into Friesland and Flanders; in process of time they proceeded to Aquitaine and along the Seine; about the year 840, they ravaged France, and in 857, made the conquest of Luna, and afterwards of Pisa in Italy. In the year 862, Rurik founded the russian monarchy; about the same time too, a Norrmann of a similar name, Rorich, became famous in the history of Holland. Soon after this, Oskold and Dir founded another sovereignty at Kief. In the tenth century Ragnvald reigned in Polotsk, from whose daughter Rogned the russian annals derive the grand-dukes of Lithuania. About the year 1000, they take Apulia from the Greeks, and Sicily from the Arabians. They gave Normandy its name, after Rollo had wrested that country from the kings of France. Even the conquest of England by the Danes, in some degree, forms a part of their history. *Allgemeine nord. gesch.* p. 220.

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independence till the ninth century; when the Varagians conquered from the Russians, a kindred north-gothic people *, the modern districts of Reval, St. Petersburg, and Archangel, and subjected the Slavonians, Krivitsches, Tschudes, Vessenians, and Merænes † to a tribute. The Russians retired to Fin-

* The earliest mention of this name is in the Bertinian Annals, at the year 839, therefore prior to Rurik's reception in Novgorod. *Dissert. sur les anciens Russes*, p. 1.—However historians may have hitherto differed in opinion concerning the origin of the Russi, Ruotzi, or Russes, yet at present the generality and the most authentic are agreed in this, that they belong to the varagian race, and therefore were originally Norrmanns or Scandinavians.—Thunmann affirms them to be Swedes, descended from Scandinavians, and speaking the Scandinavian tongue. *Untersuch. ueber die gesch. der æstl. europ. vœlk.* p. 374.

The situation of the antient Ryssland or Russland, may be ascertained by the towns which are mentioned by the chronographers. The Russians, for example, possessed Rotala, which lies in the present government of Reval; Aldenborg (now old-Ladoga) which lies in the government of St. Petersburg; Alaborg, which is in the government of Olonetz; and Holmgard, (now Kholmogor,) which is in the government of Archangel. *Bitopissaniye*, &c. p. 2.

† These tribes were partly Slavonians and partly Finns. To the former belong, 1. the proper Slavi or Slovænians, who dwelt on the lake Ilmen, in the present government of Novgorod. Of all the slavonian races which settled in the present territory of Russia, this was the only one that retained its primitive denomination; the rest took their appellative from the residencies they chose. Among those who settled about the Dniepr, and whom we comprehend under the general denomination of Kievan

Finland and Karelia ; but the Slavonians, in conjunction with the rest of the aforementioned nations, drove out the Varagians, and formed themselves at the lake Ilmen, near Novgorod, into a federative democratical republic. As the defects of this constitution soon gave occasion to intestine disturbances, the five united nations came to the resolution of

Kievian Slavi, some were called Polænians (from field, plain ; in rufs pole), others Goranians (from Gora, a mountain), Drevlanians (from derevo, a tree, a forest), Severians (from sever, the north,) ; Polotschanians, after the river Polota ; Sulanians, after the river Sula ; Bugschanians, after the river Bugue, &c. — Under the name Slavonians or Slovænians, in Russia were only known those who lived about Novgorod. 2. The Krivitsches, a flavonian stock, at first dwelling between the rivers Pripet and Dvina, and who afterwards spread themselves farther up the rivers Volga, Dvina, Oka, and Dniepr, and thence obtained their name (from Krivi the upper part). After these old flavonian people the Lettish to this day denominate Russia. The region inhabited by the Krivitsches (now the governments of Polotzk, Smolensk, and Minsk) fell more recently under the dominion of Lithuanians, and was named thenceforward Lithuanian-Russia, in the russian language Litefska. By the polish partitions of 1773 and 1793, the russian empire got back these long-withholden provinces. — To the finnish nations belong : 1. the Tschudes, as the Russians are wont to call them, and under which the Finns and Esthonians are especially implied, who had their seats in some districts of the present governments of Pscove and Reval. 2. The Vessenians, on the Bielo-Osero, in the district of Novgorod. 3. The Meres or Merænians, in the parts where are now the governments of Vladimir, Yaroslaf, and Kostroma. These are probably the present Mordvines.

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calling in the Russians to restore tranquillity to their country, and to give them protection ; in order to which they offered voluntarily to resign the sovereignty to them. The russian prince Rurik, with his brothers Sineus and Truvor, accepted the invitation. Rurik collected all his people together, came in the year 862 to the mouth of the Volkhof, and took upon him the government of the new-erected state, which from the very first comprised six several tribes, flavonian, finnish, and varagian, extending over the regions of the present governments of Riga, Reval, Polotsk, Pscove, Vyborg, St. Petersburg, Novgorod, Smolensk, Olonetz, Archangel, Vladimir, Yaroslaf, Kostroma, and Vologda.

Though the Varagians composed the predominant, and under Rurik the most consequential part of the people, (which is principally proved from this circumstance, that in the history of his time only varagian names are mentioned,) yet Slavonians and Russians were soon blended into one nation ; and though the name of the latter was transferred to the whole nation, yet the flavonian language and manners retained the superiority, as that people were considered as the predominant part both in numbers and in civilization.

Rurik, the proper founder of the flavonian state, immediately took up his residence at Staraya Ladoga, and styled himself grand-prince, thereby to

denote his supremacy over the subordinate princes. By a kind of patrimonial constitution the grand-princes had the right of granting to their sons or younger brothers distinct principalities. This right Rurik, as the eldest, exercised with his two brothers. Sineus received Bielo-Osero, and Truvor Isborisk, for their residencies, as chief towns of dependent countries. Both died childless, one shortly after the other : Rurik reunited their territories with his own ; and, in the fourth year of his reign, removed his residence from Old Ladoga to Novgorod, which from that time forward became the capital of the russian monarchy.

Scarcely had RURIK elevated himself sole ruler of the novgorodian state, when the Slavonians dwelling on the Dniepr, being oppressed by the Khazares, applied to Rurik, requesting him to give them a prince of his race to rule over them. Rurik sent them his stepson Oskold, who subdued the Khazares, and founded at Kief the second flavo-russian dominion, dependent on the novgorodian empire.

The progress of the russian monarchy is so fertile in great events, and runs so deeply into the history of the neighbouring nations, that the relation of them can be no object of this historical sketch. We will therefore pursue the chief nation alone in the most memorable periods of its history, in order to enable us to see at one view the gradual course of
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the formation and enlargement of the present extensive and powerful empire of Russia.

OLEG, the immediate successor of Rurik, who reigned as guardian of his nephew Igor, united Kief, which would now no longer acknowledge the supremacy of the novgorodian grand-princes, completely with the Russian territory, and elevated this second flavonian family-seat, to be his residence and the capital of the country. — Under these and the following reigns the power of the empire was rapidly increasing. Russian armies appeared before the gates of Constantinople; a multitude of nations were rendered tributary; the Russians carried on a regular commerce to the coasts of the Euxine; they built cities, embellished and gave laws to such as were already in being. — On the death of VLADIMIR the great, in 1015, who embraced the christian religion, and introduced it into Russia, this hasty progress of the nation was checked by the partition of the territory among his twelve sons.

This pernicious policy, which was even continued by his successors *, had for its consequences devastation and war. Russians took up arms against
Russians,

* The grand-princes, as patrimonial lords of the country, granted to their sons, younger brethren and other relations, distinct principalities; and this not only in their life-time, but even by testamentary bequests. The several princes were bound to do homage to the grand prince, as their father or elder brother, and

Russians, brethren against brethren; and amidst these bloody contentions, which were still the more destructive as either party strove to strengthen itself by calling in the aid of foreigners, arose a *third* powerful state: White Russia or Vladimir.

Russia had now three independent grand principalities within its borders, besides several smaller states arisen by partitioned lines. Vladimir was the most

were his principal vassals. The grand-prince had the right to resume the principalities which he had bestowed, and to translate these his vassals, especially when they were his sons, from one principality to another. Upon the decease of the grand-prince, from whom a distinct prince had received his principality, it became hereditary, and was regarded as the patrimony of the prince and his family; by which means every separate prince acquired nearly as much power in his territory, as the grand-prince had in the grand-principality. — After the death of Yury or George I. in 1157, the princes of Vladimir on the Kliasma, emancipated themselves entirely from the supremacy of the grand-princes of Kief, and thereupon assumed the title of grand-princes. This example was soon followed by the princes of Vladimir on the Bogue, Galitsch on the Dniestr, Smolensk, and Tschernigof; and from the time of Yaroslav II. who died in 1246, the same was done by all the separate princes who had received the charter of their principalities from the tartarian khans. — Simeon the proud, however, who died in 1353, made his brothers not only vassals, but subjects: Dmitri Donskoi publicly required all the russian princes to pay him unconditional obedience; his son Vassilly forced the princes of Suzdal and Nishney-Novgorod to unlimited submission, and Ivan I. at length restored the complete sovereignty and indivisibility of the empire.

powerful of them, and its sovereign was considered, during the following period of the tartarian oppression, as the proper and only grand-prince of Russia. At first Susdal was the capital of this state, afterwards Vladimir, and at length that honour fell to the lot of Mosco, which city George I. had founded in the year 1147. — Vladimir, as well as Kief and Novgorod, which latter grand principality had adopted a sort of monarchic-republican form of government, maintained an uncertain and often controverted supremacy over the smaller principalities, of which several from time to time had sprung up, and which, unmindful of their common lineage from the house of Rurik, lived in a state of perpetual warfare.

This state of the nation must have greatly facilitated the means of its subjugation to any foreign enemy; how much more to a wild and warlike nation, which, by the magnitude and rapidity of its conquests, was already become formidable to all Asia. Mongoles and Tartars, who, under their khan Tschinghis at the beginning of the thirteenth century, had united themselves into a powerful state, and had brought into subjection the greater part of Asia, now, in 1237, under the conduct of his descendant Batu, khan of Kaptshak, fell upon the southern Russia, where, after repeated predatory incursions, they founded a formal sovereignty. Kief fell first (1240) under their power; the grand-prince of Vladimir did homage to the khan of Kapt-

schak, and the lesser princes voluntarily followed his example. The Tartars now slackened their conquests, in order to turn them to greater advantage : they numbered the people in the principalities, imposed on them a heavy tribute, and thus riveted the oppressive yoke of foreign sovereignty which the Russians bore for upwards of two hundred years.

During this melancholy period, the grand-prince of Novgorod, ALEXANDER, honoured with the surname of NEFSKY, made himself famous by the victory which he obtained over the Swedes on the banks of the Neva, and another in Livonia (1250) over the knights of the Teutonic order. On the other hand Kief was lost to the Russian territory (1320) with the greater part of southern Russia, and fell to Gedimin, the heroic grand-prince of Lithuania, who ravished this beautiful spoil from the Tartars. Smolensk, Polotsk, Tur, and Vitebsk, had already fallen under that supremacy. Vladimir, the capital whereof in 1328 was transferred to Mosco, continued, notwithstanding its being a fief to the Tartars, to be the mightiest of all the principalities ; and the free state of Novgorod, which was secured by its distance from the oppressions of the Tartars, was growing rich amidst the general calamity, by commerce, and even spread its conquests northwards over several neighbouring regions.

The partition of the Russian empire and the general confederation of the mongole-tartar nations were the causes that co-operated to the subjugation of

of Russia ; an opposite mode of conduct liberated the Russians, and cast the yoke which they had so long borne back upon the necks of their former conquerors. Oppression and despair at length combined the russian princes in one common sentiment : several of the tartar hordes had made themselves independent, and internal disturbances and bloody contests completed the ruin of others.

Such was the situation of things, when IVAN VASSILLIEVITCH I. in 1462, ascended the throne at Mosco. This grand-principality had, even under the pressure of foreign supremacy, collected force for opposition. The principalities of Susdal and Nishney-Novgorod were already in union with it : the princes of Pscoe and Tver acknowledged it paramount, and the republic of Novgorod at least did not refuse its submission. These means and the personal character of Ivan decided his brilliant lot ; that of being the restorer of the independence of his country, and the founder of the new russian monarchy.

Ivan had reigned fourteen years, when he refused obedience to the tartars, and justified this daring step by victories which gained him the tartarian kingdom of Kazan, and made its sovereign his tributary vassal. The republic of Novgorod, which strove to maintain its independency under lithuanian protection, submitted in 1477 to the force of his arms. A similar fortune befel the principalities of Pscoe and Tver. Lithuania lost a considerable part of its territory.

ritory. The princes of Severia voluntarily submitted. The Teutonic order in Livonia alone withstood the increasing power of Ivan.

Under his successor, indeed, the rising monarchy lost for a short time the kingdom of Kazan, but in return Smolensk was incorporated again into the Russian state. — IVAN VASSILLIEVITCH II. at length burst the last shackles of the mongole-tartarian sovereignty. The entire conquest of the kingdom of Kazan was completed in seven years; the capital of it surrendering in 1552. Two years afterwards Astrakhan became a Russian province. Hence Ivan pressed forward into Caucasus and subdued the whole Kabardey. On the other hand his plans of conquest were frustrated in Livonia, which he was forced to relinquish after a contest of twenty years attended with numberless cruelties. The ottoman Turks, in conjunction with the Tartars of the Krim, fell upon Russia and ravaged its capital; but these disasters were greatly overbalanced by the opening of a channel for maritime commerce by way of Archangel, and by the conquest of Siberia, which date their commencement from the reign of Ivan, and were slowly but firmly completed under his successors.

By this conquest, for which Russia is indebted to a bold and successful robber, the monarchy extended its dominion over an immense tract of country, rich in the noblest productions of nature, and inhabited by a multitude of nations till then unknown. —

Ivan's

Ivan's successor, FEODOR, abandoned his claim to Esthonia, and obtained in return from Sweden a security to his possessions of Ingria and Karelia.

By Feodor's death in 1598, the dynasty of Rurik was extinct. During the interim till the election of a new tzar of the house of Romanof in 1613, the empire was a prey to confusion and desolation. The well-known events of the pretenders under the name of Demetrius had implicated the Poles and Swedes in the internal affairs of Russia; and MIKHAILA ROMANOF could only by large sacrifices purchase the repose of his empire. He was obliged to relinquish Ingria and Karelia to the Swedes, and Smolensk, Severia, and Tschernigof, to the Poles.

This was however the last misfortune that diminished the power of the russian empire. From that period to the present day, Russia has not only been regaining its antient possessions, but so far extended and enlarged them, that the present circumference of the empire knows of no parallel in the history of the world.

ALEXEV, the successor of Mikhaila, not only reconquered the countries relinquished by his father to the Poles, but reduced also Kief and the Ukraine on the eastern side of the Dniepr, in 1655, to a reunion with the parent-state of the slavo-russian nation. — His son, the immortal PETER I. the creator of modern Russia, acquired to his empire in 1721, by a twenty years war with Sweden, the pro-

vinces on the shores of the Baltic, which had been for so many centuries the source of bloody contentions among the northern powers: Livonia, Esthonia, Ingria, and a part of Kexholm and Karelia, were subjected to the russian sceptre, and procured to the empire, besides incalculable advantages to commerce, a firm and respectable footing among the chief european powers. — A second acquisition of the Persian provinces of Daghestan, Shirvan, Ghilan, Mazanderan, and Astrabat, was, after thirteen years possession, voluntarily abandoned.

CATHARINE II. brought aggrandizement to Russia within and without by a reform of its government, and several successful wars. She obtained from the porte, by the peace of Kutshuk-Kainardgi in 1774 the possession of the city of Azof, with the territory belonging to it; and for the security of the Russian navigation on the Euxine, the forts of Kinburn, Kertsch, and Yenicaly in the peninsula of the Krimea. A few years later, (1783,) the whole province simply by a treaty became a russian government; and in its present denomination the antient name of the Tauridan Chersonese is restored. In virtue of the same convention Russia enlarged her borders to the south by the Kuban, where now the caucasian mountains form the boundary of the russian dominion. In a second attempt to abate the preponderant power of Russia, the porte once more submitted, and was obliged to pay for the unfortunate termination of the
quarrel

quarrel by the surrender of a considerable tract of country on the shores of the Euxine, between the Bogue and the Dniestr. — On the other side wretched Poland, by a surprising vicissitude of fortune, paid dearly for the injuries which Russia had formerly sustained from this once powerful state. In the famous partition which first reduced the national imbecility and political nullity of this republic to an almost incredible proof, Catharine obtained for her share in 1773 the four lithuanian voivodeships of Smolensk, Vitepsk, Mstislaf, and polish Livonia, with a part of the voivodeships of Polotsk and Minsk. The late and sudden attempts, through favour of temporary circumstances, to withdraw from under the russian influence, and to restore the sufficiency of the nation by a new constitution, involved the exhausted republic in an unprosperous war, which ended (1793) in the loss of the fine and fertile provinces of the Lesser Poland and Lithuania. The last and desperate exertion of the Poles was at length attended by the total dismemberment of the country; the capital of the kingdom fell into the hands of the Russians; the political existence of the republic was annihilated, and the last vestiges of it were lost (1796) in the confines of the bordering states. — One consequence of the annihilation of Poland was the acquisition of the duchies of Courland and Semigallia, including the circle of Pilten, which on the dissolution of their feudal connection with the republic, by a resolution of the estates of the country,

country, submitted themselves unconditionally in 1795, to the sceptre of the empress *.

While Catharine the second was augmenting the power of her empire on one side by conquests and treaties, she strove on the other to promote the same object by the mild authority of her laws, and the methods of civilization. Compelled by the exigencies of his situation, the mightiest of the princes of Caucasus, the tzar of Kartuelia and Kakhetty put himself under the protection of the russian empire, by acknowledging in 1783 the supremacy of its monarch. Catharine invited people from all countries to come and settle in her dominions, and thus established numerous colonies. She reduced a multitude of tributary nations dwelling in the heart of Siberia to a complete submission to her laws. She set on foot and

* According to an authentic estimate, published in 1796, by Major Oppermann, the acquisitions made during the reign of Catharine II. are thus given :

	Square versts.	Inhabitants of both sexes.
At the first partition of Poland in		
1773 - - - - -	76,558	1,226,966
From the porte in the years 1774		
and 1783 - - - - -	113,100	171,610
From the porte in the year 1791	23,053	42,708
At the second partition of Poland,		
1793 - - - - -	202,383	3,745,663
By the subjection of Courland - -	16,273	387,922
At the third partition of Poland,		
1795 - - - - -	94,645	1,407,402
Total	526,012	6,982,271
		encou-

encouraged several voyages of discovery, which obtained for the russian empire a new sovereignty in the eastern ocean, and on the western coast of America.

We have hitherto followed the principal clue of the russian empire, without concerning ourselves with the particular states into which Russia, during the period of its partition, was divided. None of these divisions left so many visible traces in the nation and in the political constitution, after its reunion, as the defalcation of the grand-duchy of Kief. Their origin from two stems, distinct though belonging to one nation, already separated the kievian from the novgorodian Slavi. Their destinies and their political condition have been since continually removing them farther asunder; and when the state of Kief, after a separation of more than three centuries, dissolved again into the russian mass, its inhabitants were still a very different people from their primitive brethren, in language, manners, and constitution. This difference subsists at present, notwithstanding the political incorporation; and the two nations are still designated by different names: the descendants of the novgorodian colony being now called Great-Russians, and the kievian Little-Russians. The former, in the proper acceptation, compose the principal nation*, and chiefly dwell in the

* The Great-Russians may be regarded as the main-nation: 1. because the kievian state became, soon after its origin, subject to the novgorodian; 2. because the former, during the period of separation,

the old russian provinces, though they have spread through all the conquered countries. The home of the Little-Russians is the Ukraine, or the present governments of Kief, Tschernigof, Novgorod-Sivirsk, Kursk, Orel, Tambof, &c. and they are also called Kozaks, though in modern times these only form a particular class of the nation, and their constitution is now almost entirely effaced. — As besides the Little-Russians, there are other branches of the Kozaks, and these tribes, notwithstanding their manifest russian origin, being very distinct from the proper Russians by their mixture with other nations, and by their peculiar constitution, it is necessary to point out the essential particulars of their origin and circumstances.

By Kozaks, in its largest sense, is understood original separate russian stems, who settled in the southern regions of modern Russia, and formed for themselves a military government. The name Kozak is probably tartarian, and signifies an armed warrior. It is likely that it may have passed from the Tartars to the Russian Kozaks, when the latter, after the demolition of the tartarian sovereignty,

ration, was under a foreign sovereignty, whereas the great-russian state in part preserved its independency, and, under the supremacy of the Tartars, had an uninterrupted succession of native princes : 3. because Kief, on its re-union with the russian body-corporate, submitted to its sovereignty : 4. because the Great-Russians are by far the most numerous, and their dialect is the prevailing language.

settled

settled in their seats and adopted a similiar mode of life *.

The Kozaks are divided, as well by their origin as by their present constitution, into two main branches ; the *Kozaks of Little-Russia*, and the *Kozaks of the Don*. From the former are derived the slobode-regiments in the government of Kharkof, and the zaporogians ; from the latter the volgaifki, the

* The emperor Constantine Porphyrogenneta, so early as the ninth century, mentions a country of *Kasachia*, between the Euxine and the Caspian, at the foot of the caucasian mountains ; and, from the russian year-books, we learn, that the russian prince Mstislaf at Tmutarakan, a son of the great Vladimir, in the year 1021 made war upon a nation call *Kosagi*. Both seem to be the same people, and of tartarian origin. They got their name probably from their mode of life, as the Kirghis-Kaisaki bear the same appellation from their easy method of carrying on war. The russian annals frequently mention the tartarian Kozaks, especially under the reign of Ivan I. in whose time there were *Ordinskoi* (from the great Orda or Horde, the chief seat of the Tartars on the Volga) and *Azofskoi* Kozaks. These two branches are to be considered as the last remains of the tartarian sovereignty in Russia, and even these are either exterminated by the Russians, or have themselves dispersed, and united with other tartarian nations. — In their stead arose the *Don-kozaks*, who, notwithstanding this connection and the apparent analogy of their manner of life, political regimen, and features of face, are genuine Russians, as their language and religion evince. Had they been converted to the latter, the russian annalists, who carefully take notice of every conversion, would certainly not have passed it over in silence. *Sammlung russ. gesch.* vol. iv. Compare with *Hupel's nord. miscell.* part 24 and 25. *Annales de la Petite Russie, par Scherer.* *Georgi's description of all the nations of the russian empire.*

gre-

grebenfki, the orenburgski, the uralfki, the fibirski, and several other branches of Kozaks.

The grand-principality of Kief was, since Oleg transferred thither his seat from Novgorod, the capital of the ruffian nation; and continued to be so till the year 1157, when the grand-prince Andrey Yuryevitch Bogolubskoi chose Vladimir for his residence. From that time forward, though Kief had its own princes, yet this continued no longer than till the year 1240, when the Tartars conquered Kief and desolated the whole country. Eighty years the tartarian dominion lasted, during which this grand-principality retained its native princes, but they were under the arbitrary orders of the Tartars, and were obliged to divide their sovereign-rights with the tartarian viceroys. From this supremacy, which left the country still some semblance of an independent constitution, Kief fell in 1320, under the dominion of the lithuanian prince Gedemin, who defeated the last grand-prince Stanislas, placed a viceroy in his stead, and in his conduct towards this unhappy country, acted from no law but that of the conqueror.

At this æra we are probably to fix the origin of the MALO-RUSSIAN Kozaks, or Kozaks of Little-Russia. The dread of a foreign sovereignty which seemed to announce itself by unusual severity, may be reasonably supposed to have given rise to this military republic. A multitude of fugitives, who had abandoned their country, collected themselves together

together in the lower regions of the Dniepr, where they soon began to form a petty state. The perpetual incursions and contests to which they were subject from their neighbours the Poles, the Lithuanians and Tartars, obliged them to adopt a military form of government. Their numbers were increasing considerably, when Kief, for the second time, in 1415, was ravaged by the Tartars; and, lastly, on this grand-principality being entirely with Lithuania incorporated into the polish state, and the kings of Poland, and the inhabitants suffering still greater hardships and oppressions than before, many of them again fled to the new colony, which had now assumed the name of Little-Russia in order to distinguish themselves from the great russian empire. By insensible degrees they now spread as far as the Bogue and the Dniestr, and possessed the whole country included by these rivers and the Dniepr. Villages and towns sprung up in which the Kozaks passed the winter with their families; all the effective men roaming about the steppes during the summer, and, like the knights of St. John, perpetually engaged in petty wars with the Turks and Tartars*. These circumstances rendered them a barrier to the kingdom of Poland against these enemies; the rise and progress of the new free-state was therefore not only not impeded on the part of Poland, but even fostered and en-

* So early as towards the latter end of the sixteenth century, the Kozaks subdued a part of the Crimea, captured Trebisond, and made military campaigns to Constantinople.

couraged

couraged in various ways. King Sigismund made over in perpetuity to the Kozaks, in 1540, the countries lying above the cataracts of the Dniepr. Stephen Battori put them upon a regular military footing, gave them a hetman or supreme commander, and granted them likewise considerable districts *. His successors, however, departed from these prudent measures; they forbade the Kozaks to quarrel with the Turks, without considering that they thus destroyed the fundamental policy of this warlike state; Poles forced themselves into the country and took possession of the principal offices; the greek clergy, in short, were obliged to renounce the patriarch of Constantinople, and to acknowledge the spiritual supremacy of the pope.

These and numberless other oppressions at length brought on a tedious war, prosecuted with various success, and terminating on the part of the Kozaks with their throwing off the supremacy of Poland, and submitting themselves formally to the czar of Russia. This submission took place in the year

* The sixth hetman, prince Bogdan Roschinsky, had a grant of the town of Terechtemirof, and it from that time became the capital of the Kozaks, which had hitherto been Tscherkassy. The Kozaks obtained permission to inhabit the whole region from Kief to Terechtemirof, and on the eastern side of the Dniepr their former possessions were enlarged by a tract of country of a hundred and twenty miles in extent. Thus Stephen had the prudence by this piece of policy in some measure to subject the Kozaks to him. His successors profited by this dependence, till at last the mutual relations of the two states, which had arisen from protection on one side and gratitude on the other, degenerated into oppression and rebellion.

1654,

1654, under the hetman Bogdan Khmelnitzki, and this example was soon followed by all the towns and inhabitants on the eastern side of the Dniepr, with Kief. — Thus at length was Little-Russia and the antient main-seat of the slavo-russian nation, after a separation of three hundred and thirty-four years, again united with the main body of the russian monarchy. The events of this country, from that period, fall in with the history of the russian empire. The name Little-Russia indeed still subsists; but the form of its government, its kozak establishment, and the nation itself, have undergone great alterations, which have only some vestiges of its former difference.

During the war between the Kozaks and the Poles numerous bodies of fugitive Kozaks fled from the western to the eastern side of the Dniepr into the southern provinces of the russian empire, where, preserving their military constitution, they settled in an uninhabited but fertile region *. This is the origin of what are called the slobode Kozaks. The country in which these were established had antiently belonged to the grand-principality of Kief, and, from the time of its being first over-run by the Tartars, had remained an unpeopled desert; the new-comers who now returned to the desolated inheritance of their fathers, were well-received by tzar Alexey Mikhailovitch; their numbers increased

* In the present government of Kharkof, and partly too in those of Kurik and Voronetch.

by the arrival of new settlers, and they constructed many towns and villages. This region at present is one of the most inhabited of the russian empire.

The second considerable colony of the malo-russian Kozaks, the Zaporogians, arose much earlier than the slobode regiments. In order the better to defend the country of the ukraine Kozaks against the inroads of the Tartars, it had been settled that a part of the young unmarried men should always abide on the southern borders where the Dniepr falls into the Euxine ; by which means this district shortly became a rendezvous of stout martial youths, and the stay there was considered as a school for military exercises. The polish government favoured this seminary, by which the country obtained the benefit of a border-militia ; and the greater degree of freedom in which the young Kozaks here passed their time, was so agreeable to them, that they were never desirous of a discharge from their unquiet and dangerous posts. Accustomed to a bachelor's life they admitted no women among them ; yet their numbers were gradually increasing by fugitive Kozaks who sought a shelter among them from polish oppression. By little and little their habitations extended to the shores of the Bogue, and they established themselves in all the adjacent parts. About the commencement of the seventeenth century they came to a total separation from the parental stock, the malo-russian Kozaks, under the hetman whereof they had hitherto lived, and erected a
military

military state of their own, whose chief was to be an elective arbitrary koschevoi-ataman. Their chief-seat, which they called *setscha*, consisted of a fortified camp, and though they often removed it from one place to another, yet they constantly remained about the cataracts, *porogi*, of the Dniepr, from which they received their distinctive appellation * : Zaporogi, "at the cataracts."

The constitution of this little military nation was one of the most curious in the world. War was the ultimate aim of their social connection, their habitual trade, and their darling employment. Agriculture and the breeding of cattle they entirely neglected, and followed the fishery, and the chase, no otherwise than as matters of pastime. Celibacy being enjoined as a fundamental law of their state, for gratifying the instincts of nature they made a practice of bringing off women from their neighbours; but the ravishers were obliged to keep the victims of their lust at a distance from the *setscha*. In order to keep up their numbers, they not only stole children wherever they could catch them, but criminals and vagabonds from all the nations around were welcomed and adopted by them. There are but few

* *Kosch* in the tartarian signifies a camp. Ataman is of like import with hetman. The term *setscha* comes from the rufs verb to cut off, to lop away (1); the camp was fortified, and consequently cut off from the circumjacent region or district. *Za* in rufs signifies behind, beyond, and *porog* a cataract or water-fall.

(1) *Otssetsch*.

European languages that were not spoken among them. — Their constitution was purely democratic; every kozak enjoyed equal rights. Their ataman was elected annually; and, on the expiration of his office, fell again to the rank of the common Kozaks. Every citizen of the republic had equal pretensions to this sovereign dignity. — No written laws were known to them, but they had usages which held the place of law, and by which decisions were made with extraordinary strictness and impartiality. A Kozak who killed his fellow-citizen was buried alive with the body. A thief was obliged to stand three days on the pillory, and punished with lashes till frequently he died under the scourge. — The generality of them adhered to the Greek church; yet no notice was taken of diversity of opinion in matters of faith. Their moral character was conformable to their way of life and form of government: they had all the virtues and vices of a free people subsisting by war and rapine. They were courageous and savage; hospitable and greedy of prey; active and temperate on their expeditions, and lazy and gluttonous at home. — The number of effective men among them, amounted at times to forty thousand*.

* The Russian chancery was seldom exactly informed of the real number of the Kozaks, they considering their force as a political secret. In the year 1764, the number of effective people was thought to amount to 27,117; but probably they were much stronger.

These

These Kozaks have often changed their sovereignty, if we may so call the relation in which this indomptable people stood one while with Poland, then with the Tartars and the Porte, and lastly with Russia. Peter the great destroyed their sotscha, on their taking part in the rebellion of the ukrainian hetman Mazeppa; but they assembled again afterwards under the protection of the khan of the Krimea, and were re-admitted in 1737 as russian vassals. A chancery was erected for the purpose of overseeing them, which however had but little or no influence on their internal government. The only obligation they were under to the empire was to appear in the field when commanded, at which times they were paid and provided as was customary with the Kozaks. In the Turkish war which terminated in 1774, they not only proved faithless on several occasions, but also betrayed their design of rendering themselves independent. When they re-captured the region of the Dniepr, which at that time was called New Servia, but afterwards belonged to the New-russian government, and was peopled with colonists, they declared that country to be their property, practised hostilities against the settlers, and partly by artifice and partly by violence reduced about fifty thousand Malo-russians to their obedience. This rebellion, their life of celibacy and rapine, the total neglect of agriculture in so fertile a country, and the constant resistance they made to every attempt at bringing them to a better conduct, at length deter-

mined the emprefs, in the year 1775, entirely to annihilate the existence of this little spartan state. A body of ruffian troops furrounded and difarmed them. A manifesto was iffued, by which it was left to their choice, whether, by adopting a decent and moral regimen, they would become useful fubjects, or take themfelves out of the empire. A part of them remained, and took to various trades; others in numerous bands withdrew to the Turks and Tartars, or led a roving life about the ruffian frontiers. The country which they had poffeffed was added to the then New-ruffian government, and belongs at prefent to that of Ekatarinoflaf.

Thus far their hiftory is known and even related by foreign writers. Not fo notorious, however, is the remarkable fact, that the zaporogian Kozaks ftill fubfift, only under another name, and have recently received a new constitution in a country allotted to them. By an ukafe of the 30th of June 1792, Catharine II. affigned to the Zaporogians, who rendered themfelves ferviceable during the laft Turkish war, the ifland of Taman (belonging to the province of Taurida) with the entire region between the river Kuban and the fea of Azof as far as the rivers Yeya and Laba (a tract of 1017 fquare geographical miles) for their place of fettlement. They obtained at the fame time, under the name of Kozaks of the Euxine, a well-regulated kozak-constitution, and the right of electing their own atamans; but are immediately dependent on the governor of the
the

the province of Taurida, and are placed under the department of the college of war. Their numbers, of both sexes, amount now to above twenty thousand, among whom is a disciplined corps well-equipped of fifteen thousand men.

The second main branch of the Kozaks are the **Donskoi**. They have this appellation from the region of the river Don, which they have constantly inhabited, and most probably derive their descent from novgorodian Russians. The first settlements of them on the Don cannot well have been earlier than after the Tartars were forced out of those parts. The same homestead and a similiar mode of life probably occasioned the tartarian name of Kozaks to be given to the rising colony, which was afterwards communicated to the confederate Malo-russians, who lived under a like military constitution. It is not improbable that the Russians, on their first coming, found still considerable remains of Tartars in these parts, with whom they united, inducing them to adopt the greek religion and the russian language. This supposition at least accounts for the rapid increase of the republic, and the russo-tartarian mixture which is still perceived, as well in the features as in the language of the donskoi Kozaks.

This colony, soon after its origin became a considerable state. The happy effects of their profitable warfare tempted a multitude of bold and enterprising

prising youths to come over to them from all the provinces of the empire; and the vassalage of the boors, introduced about this time into Russia, contributed greatly to multiply their numbers by run-aways from this depressed condition. A great many escaped back to their former homestead, and even the prisoners of war obtained denizenship by the policy of the Kozaks, for the sake of increasing the number of their soldiery.

After the unfortunate campaign of the Turks against Astrakhan in 1570, they felt themselves sufficiently bold and powerful to make Tscherkask their capital sixty versts from the fort of Azof belonging to the Turks. — They were now in reality a bulwark to the russian empire; the monarchs of it therefore acted by these Kozaks, as the kings of Poland about the same time did by the Malorussians: they favoured their growth, assigned them countries free of imposts, on the borders, and endeavoured to keep them in a sort of dependence which might be useful to the government, especially in times of war. In the year 1579, we for the first time meet with donskoi Kozaks among the russian troops; a body of them consisting of three thousand men were in the expedition made by tzar Ivan Vassillievitch against Livonia, by whom they were also paid. Since that time they have frequently been of great service to the russian empire by their bravery; though from their love of independence

and from their propensity to depredation, they have suffered themselves to be incited to rebellion *.

At present the donskoi Kozaks inhabit the plains about the Don, between the governments of Saratof, Caucasus, Voronetsh, and Ekatarinoslaf, as far as the sea of Azof. Their territory, which even now amounts to upwards of three thousand six hundred square miles, was formerly far more extensive; but since the rebellion of 1708, a part of it has been added to the adjacent provinces. As the donskoi Kozaks have preserved their kozak constitution entire, they live under a military regimen totally different from the other governments. Their number is estimated at two hundred thousand, of whom a corps of light-cavalry of twenty-five thousand is always ready for marching.

Internal revolutions, and a disposition to broils, have given birth to many emigrations of the donskoi Kozaks, whereby several new branches of Kozaks have arisen, of which only the most signal are deserving of being further particularised. — The earliest emigrations happened to the Volga, where the Kozaks used only to tarry in summer, and on the approach of winter to return to their dwellings about the Don. In process of time, a part of them completely settled about the first mentioned river, whereby several towns on the Volga, as Saratof,

* The most important rebellions of this nation, are that of the year 1670, of which Stenka Rasin was at the head, and that of 1708, under the conduct of Bulavin.

Dmitreffk, Tzaritzin, Tschernoi Yar, and others, obtained inhabitants, who afterwards for the most part went over to the civil constitution. In the year 1734, the VOLGAIC Kozaks were declared independent on those of the Don; when they obtained equal privileges with the latter, and had their own ataman. At present the kozak regimen is abolished among the greater part of them; no more than two colonies are upon the true kozak establishment and perform military service. These are the DUBOFSKOI and the ASTRAKHANSKOI. The former have their chief seat in the little town of Dubofca, on the right bank of the Volga. The country assigned them lies between Dmitreffk and Tzaritzin, and extends over a space of a hundred versts in length and sixty in breadth. They amount to about three thousand heads. In the year 1776, they were obliged to deliver a part of their men, who were formed into a proper kozak regiment, and had its quarters between Mosdok and Azof. — The astrakhan Kozaks dwell partly in the city of Astrakhan, and partly in the villages around; in numbers they are about equal to the former.

A second colony of the donskoi Kozaks are the GREBENSKOI who separated from their parent-stock nearly at the same time with the VOLGAIC, and settled about the river Terek, whence they are also called TEREKSKOI Kozaks. In a campaign of the tzar Ivan I. against the caucasian Tartars, a body of them, as the van of the army, penetrated into
a part

a part of this great chain of mountains, which on account of its prominent rocks was likened to a *comb* *; and on this occasion it was that they received their appellation, which they generally bear to this day. Their present homestead is on the Terek, where their regiment, consisting of twelve hundred men, does duty in the frontier lines against the highland Tartars of Caucasus.

They dwell in five fortified stanitzas, making so many companies. Besides their own commanders and war-officers †, they are under the orders of the commandants in the Kitzliar and Mosdok. Being principally employed against the Tartars of Mount Caucasus, they are almost always under arms, and therefore in constant pay. Being thus inured to service, courageous, and well-acquainted with the mountains and the tartarian manner of fighting, they are of excellent service against these untractable and piratical neighbours; but their number not being sufficient, in the year 1776, six stanitzas, or fortified villages, between Mosdok and Azof, were added to them, and supplied with Kozaks from the Volga. These form one distinct polk, or corps, under the denomination of the troop of Astrakhan-Kozaks. — Near the grebenskoi Kozaks dwell the SEMENSKOI, who are of the same origin with them, and therefore need no particular account.

* In russ, *greben*.

† Voiskovoi ataman.

More lately than the volgaic, the ORENBURG-Kozaks separated from their common stem. At their first rise they dwelt collectively about the river Samara; but, after the construction of the orenburg-line in 1730 to 1740, the major part of them were transported thither. At present they have their homestead along the Samara; along the Ural and the Ural, from Verkural'sk to Iletzk, also in the petty forts erected against the Kirghises and the Bashkirs. In all these forts, Orenburg excepted, they compose the majority of the inhabitants, and can easily bring twenty-thousand men into the field; though only from eight thousand to ten thousand are inrolled for military service.

One of the most numerous and powerful branches of the donskoi stem is formed by the URALSKOI, formerly called the YAÏKSKOI Kozaks. According to their traditions they first arose about the beginning of the fifteenth century by an inconsiderable number who drew towards the Caspian as freebooters, and afterwards established themselves at the mouth of the river Ural, formerly called the Yaïk. Augmented by Tartarian stragglers and prisoners of war, the colony soon spread farther up the shores of this river; and, at the time of their voluntary submission to tzar Mikhaila Feodorovitch, they were already a considerable nation, which has since much increased by emigrations from the Don. At the commencement of the last century they obtained

tained from the russian government a regular constitution, with permission to settle in their present possessions. They were placed on the footing of the Kozaks of the Don, obtained the free and exceedingly-productive fishery of the Ural, the licence to fetch their salt, duty-free, from the adjacent saline-lakes, the liberty to distil brandy, together with several other privileges. Presuming upon their opulence, in the year 1772 they rose up against a reform, proposed by the government, of the irregular troops; they were, however, soon reduced to obedience. The year following a part of them joined the crew of the famous rebel Yemelyan Pugatshef. On the restoration of tranquillity the government restored to them their possessions and privileges; but in order to efface the memorial of this rebellion, the name of these Kozaks, that of their capital, and of the river where they dwelt, were abolished, and changed for those they bear at present.

Since that time their political constitution has got a somewhat different form, to prevent the like misfortunes in future. Their number is computed to be about thirty thousand men fit to bear arms, and they keep up a corps properly equipped of twelve thousand men, among whom, however, are many Tartars and baptized Kalmuks. Their proper homestead is along the right shore of the Ural, from the mouth of the Ilek to the Caspian; where, besides

sides their grand capital Ural'sk, they possess the important town of Gurief on the Caspian, and perform service in the line of forts on the Ural against the Kirghises. On the left or kirghisian side of the Ural they have only the small fort Iletzk on the Ilek, which is inhabited by an independent colony detached from the main body. Their territory, which extends in length eighty geographical miles, yet forms no particular division in the political geography of the empire, (like the homesteads of the Kozaks of the Don and the Euxine,) but belongs to the government of Caucasus.

The last, and in its origin the most remarkable branch of the great donskoi family, that we shall here mention, are the SIBERIAN-Kozaks. Instigated by a disposition to roaming and to pillage, considerable multitudes of donskoi-Kozaks, in the sixteenth century abandoned their homestead on the Don, in order to rob and plunder the countries lying eastward. In their predatory expeditions they were not only dangerous to the newly-acquired russian possessions on the Volga, but they even ventured to embark on the Caspian, where as enterprising pirates they soon became formidable to all the bordering nations. At the time that these desolating swarms of robbers were spreading terror on every side, Ivan Vassillievitch II. sat upon the russian throne. The efforts of this prince to restore order and security to the provinces he had conquered from
the

the Tartars, and to give vigour to the commerce with the neighbouring asiatic nations, had scarcely struck root, when the flagitious spirit of depredation on the part of the Kozaks threatened to frustrate his fairest hopes. He, therefore, in the year 1577, assembled a considerable army and got together a fleet of ships to chastise these audacious hordes, and to restrain them for ever within the bounds of duty. Panic-struck at these mighty preparations, the robbers dispersed and fled into the neighbouring regions. A company of between six and seven thousand, proceeded, under the conduct of their ataman Yermak Timofeiyef, along the rivers Kama and Tschuffovaiya, onwards to Permia, and ascended the Ural mountains. Here Yermak saw before him the immense tract of country which we now call Siberia; unknown wildernesses and ferocious tribes, never seen by the rest of mankind, seemed necessarily to set bounds to his farther progress; but animated by courage, and delighted with the bold idea of being here the founder of a new and extensive empire, Yermak, with his handful of armed companions, marched down the side of the Ural chain, defeated the tartar khan Kutschum, pressed forwards to the Tobol and to the Irtysh, and to the Oby, and subjugated on this astonishing expedition, Tartars, Vogules, and Ostiaks. Fortune had done much for Yermak, and Yermak had done every thing he could for being worthy of his success, but

He denied him the enjoyment of his heroic enterprise. His little army, wasted by battles and fatigues, was not sufficient to maintain a tract of so many thousand square miles, and to keep in obedience such a number of conquered nations. In the impossibility of completing his conquest by the establishment of a state, he resolved at least to rescue from oblivion the memorial of his achievement, by raising for posterity an indelible monument of the boldness of his genius. He accordingly in 1581 made over his conquests by a formal capitulation to tzar Ivan Vassillievitch; who, in return for this important service rendered to the country, absolved him from all responsibility for his former undertakings to the detriment of it, and nobly rewarded his magnanimity and his talents.

If ever a grand project was brought to effect by small and insignificant means, it was certainly in this conquest of Siberia; and if the man who was capable of conceiving it, and with such means of accomplishing his purpose, merits the appellation of a great man, then posterity cannot refuse that name to the conqueror of Siberia. — Yermak had not the good fortune to see his plan of conquest ripen to perfection. He died in 1584; but after his death the discovery and conquests were prosecuted, by regiments of donskoi-Kozaks sent thither for that purpose, as far as the eastern ocean and the mountains of China; and in the middle of the 17th century

tury this whole part of the world was already a russian province.—As well those who were implicated in Yermak's rebellion, as the Kozaks who had more lately come to Siberia remained in that country as a militia to keep the reduced nations in obedience. Most of them married with the natives of all nations; many of those who came afterwards brought their families with them. This was the origin of the siberian-Kozaks, whose number at present far exceeds a hundred thousand; but of whom the greater part carry on trades as burghers, and only about fourteen thousand do military duty as proper Kozaks.

We pass on now to the remaining branches of the flavonian stock, which either wholly or in part are inhabitants of the russian empire; confining ourselves to the most striking results in the account we shall give of them, as the greater part have their own histories, which only in certain respects have any connection with our present plan.

2. Of the three flavonian nations, properly so called, that are inhabitants of the russian empire, next to the principal nation, the POLES are the most numerous. According to the russian year-books, (for domestic accounts are here entirely wanting,) this people, at the same time with the russian Slavi, and on the same occasion, came from the Danube to the Vistula. Their state, now nearly extinct, was probably founded in the ninth century; though

they first appear in history only at the close of the tenth. Notwithstanding they sprung from one stock with the Russians, the two nations were almost continually involved in hostilities, now threatening the one, and now the other with destruction, and which finally terminated in depriving the Poles of their existence as an independent nation. For rendering the mutual relations of the two countries more perspicuous, it will be necessary to distinguish two periods: the preponderance of the polish state over the ruined russian empire; and the triumph of the latter, with its increasing power, over the declining polish republic.

The former period dates its origin from the unfortunate battle on the Kolka, in which the combined power of the russian princes was defeated by the Tartars, and in its consequences brought Russia under the dominion of these furious conquerors. During the whole period of the tartarian oppression, and even for a long time after, the Poles and Lithuanians, less harassed by the mongole-tartarian hordes, maintained a decided superiority over the russian state, enfeebled by its partition and the abuses of a foreign sovereignty, and managed it so profitably that they seized on a great part of the finest provinces of that empire. The several principalities of Smolensk, Polotsk, Tur, Vitepsk, Lutzk, Briensk, and Pereyaslawl, and the whole grand-dukedom of Kief, with various other tracts of country,

country, the enumeration whereof would be tedious, fell, in these times of devastation, by force of arms, to Lithuania; and on the union of that state with the kingdom of Poland, became part of the polish empire. After their emancipation from the tartarian yoke, it occurred to the russian princes to prosecute their claims to the captured provinces; but the fortune of war is too changeable always to favour the righteous cause, and the greatest and finest part of the lost territories remained with impunity in the hands of the usurpers, who dared to abet by their arms the resistance of several of the russian provinces against the sovereignty of the empire. The domestic disturbances which afterwards weakened Russia, notwithstanding the restoration of the integrity and indivisibility of the empire, were ever furnishing the Poles with pretence and occasion for meddling with its internal affairs. During the deplorable anarchy caused by the false Demetriuses, they constantly, by the suggestions of a refined and ambitious policy, took part with one or the other usurper; and, when at length the polish prince Vladislaf was called by their influence to the russian throne, they not only recaptured Smolenik, but even made themselves master of Mosco. Indeed the election of a native prince, and the expulsion of the Poles from the capital, restored order and tranquillity to the empire; and once more, and for the last time, its independency

was to be purchased. The peace which secured the throne to the new tzar Mikhaila Romanof, and dismissed the Poles from Russia, obliged that prince to relinquish the provinces of Smolensk, Severia, and Tschernigof. With this last degradation, however, the polish influence ceased; the preponderance of this state was gradually declining, and the inexorable Nemesis brought on the period when the Poles were obliged to do penance by a long series of misfortunes, even to the dissolution of their national existence, for their mistaken or ill-supported call to the dictatorship of the north.

Already under the successor of the politic but humiliated Mikhaila, Russia completed the wide circuit of her territories by reconquering her ravished provinces; and the grand-principality of Kief, after a long separation, united again with the parent-state. In proportion as Russia, by the vigorous transformations of Peter the great, increased in inward strength and outward consequence, Poland was sinking, through the defects of an ill-organised constitution, into a political imbecility, the consequences whereof were but too soon visible to the disadvantage of the nation.—The causes of this decline belong not to the plan of the present undertaking; and the progress of the russian superiority, with the ultimate consequence of the unequal relation of the two states, has been already mentioned in its most essential periods.

Accor-

According to the present state of the russian empire, the Poles, excepting the chief nation, form the most considerable part of the aggregate population. They are either by millions together in the governments of Polotsk, Mohilef, Minsk, Brazlau, Vosnesensk, Podolia, Volhynia, Vilna, and Slonimsk; or in smaller numbers as colonists, in the circle of Selenghinsk, on the Irtysh, and in various other parts of the empire.

3. The third flavonian nation within the borders of Russia, are the SERVIANs or SERBES, a branch of the illyrian Slavi. By the denomination of Illyria, was originally understood no more than the eastern coast of the Adriatic. In the fourth century the appellation of Great-Illyria sprung up, which comprehended almost all the roman provinces in the eastern part of Europe, between the Adriatic and the Danube, and even quite to Pontus. At present that country is divided by its sovereignties into the venetian, hungarian, and turkish Illyria. Of the latter the kingdom of Servia is a part, having received its name from the inhabitants. The Turks call it Lafs Vilayeti, or Lazarus-land, because in the year 1365, when they subdued it, Lazarus was prince of Serbia. It formerly consisted of two provinces, the proper Serbia and Rascia, and the inhabitants were accordingly distinguished into Serbians and Rascians.

The Servians and Raitzes in the russian empire are colonists, to whom in the year 1754, a consider-

able district was allotted on the Dniepr near and upon the possessions of the zaporogian Kozaks. This country, which got the name of New Servia, was for the most part an uninhabited desert, extending to the then polish borders, by which it was furrounded on three sides. The Serbians who voluntarily settled here in considerable numbers, were formed into a military association, to be a check upon the dissensions and excesses of the Zaporogians. In the year 1764, the whole of this tract of country was erected into the government of New Russia, and at present forms a considerable part of the province of Ekatarinoslaf.

There are still two other tribes in the russian empire, which, notwithstanding the obscurity of their origin, are supposed to be related to the Slavi. These are, the LITHUANIANS and the LETTISH; the latter also comprise the KURES among them.

4. The lettish race, to which the Lettes, LITHUANIANS, and old Prussians belong, was not a primitive stock, as the finnish, the germanic, or flavonian, but a distinct branch, now become incognizable, of the Slavi, and which at the same time evinces a near affinity with the Vendi. The conformity of the lettish with the flavonian and old vendish language, and the sameness of their antient mythology, gives to this supposition a high degree of probability.—The appellative Litva, by which the Lithuanians call themselves, is found in Nestor's chronicle

chronicle so early as the eleventh century, who enumerates the Lithuanians among the nations tributary to the russian monarchy; which could not find means to render itself an independent nation till the time when dangerous intestine divisions sprang up in Russia under the successors of Vladimir the great. She then freed herself from the russian supremacy, enlarged her borders at the expence of her former masters, and at length grew to be a power, formidable alike to all her neighbours. In the thirteenth century Ringold first appears under the title of a sovereign grand-prince. His son Mendog profited by the tartarian incursions into Russia for marching forth to make conquests here: under him and his successors the whole of lithuanian Russia, together with Volhynia and other provinces*, fell off by degrees from Great Russia. Gedemin, one of the most renowned of these princes, drove the Tartars out of Kief, and subjected that grand-dukedom to him. Yaghello, one of his successors, of another race, caused himself to be baptized in 1386, married the polish queen Hedvig, and united Lithuania in perpetuity to the state of Poland; in consequence of which union the conquered russian provinces devolved to that kingdom. Since that period Lithuania has constantly followed the fortunes of Poland; and, with the gradual extinction of it, has likewise

* See the article, Russia and Poland.

fallen a prey to her stronger and powerful neighbours.

At the partition of the year 1773 Lithuania furnished the whole share which Russia at that time obtained, and out of which the present viceroyalties of Mohilef and Polotsk are formed. In the subsequent partition of the year 1793, this grand-duchy again lost 1731 square miles and 850,000 souls, which now belong to the vice-royalty of Minsk; but the larger portion which Russia got on this occasion, was taken from Little-Poland. In the final partition of the year 1795, the last remains of Lithuania also fell to the russian empire, of which at present the vice-royalties of Vilna and Slonimsk are composed. These provinces of the russian empire are therefore those in which Lithuanians reside, but the number of people of which this nation consists can hardly be given with any degree of accuracy, as they are everywhere mingled with Russians and Poles.

5. The LETTES were originally one people with the Lithuanians. Both nations spoke the same language, (as even at present the lettish can only be considered as an altered dialect of the lithuanian,) and their very names seem in fact to be the same *.

Till

* We find in the accounts of the middle ages the following denominations used without distinction: Letthania, Letthovi a, Litthavia, Litfonia, Lottavi, Litthvini, Letthovini, Litthvani,

Till towards the end of the twelfth century Livonia or Lettland was entirely unknown to the german historians ; it is mentioned only by Danes, Swedes, and Russians : by the two former on occasion of their piracies, and by the Russians for denoting their dominion over that country.

The provinces on the Baltic, now known by the names of Livonia, Esthonia, Kurland, and Semigallia, belonged in the earliest times to the russian state, and had even a share in the founding of it. Nestor *, the oldest and most authentic russian annalist, names at least among the tributary nations, Litva, Semigola, Kors, and Lif : that he does not expressly mention the Lettes may probably proceed from their not being at that time a particular nation distinct from the Lithuanians. The dominion of the russians over these nations, is thenceforward confirmed by several additional testimonies. When

ni, Lettones, &c. Probably the Lettes obtained their particular name from their first homestead. In the circle of Valk, not far from the town of Venden, a river named Leete takes its rise. This river is called in lettish *ta Latte*, and a Lette is in their language *Latvis*, a man living by the river *Latte*. It is not unlikely that *Lettgallia*, so frequently mentioned in the annals, is from the same origin. *Leitis* means in lettish a Lithuanian, and *gals* the end, therefore the country which borders on Lithuania. *Yannaus*, hist. of Livonia and Esthonia, vol. i. p. 17.

* See an account of Nestor and his chronicle, &c. in the Selections from foreign literary Journals, printed for Debrett, 2 vols. 8vo. vol. ii. p. 293, & sqq.

the Germans had settled in Livonia, Meinhard did not dare publicly to preach, till Vladimir, grand-prince of Polotzk had first granted him permission; "because (as Henry the Lette affirms) the heathenish inhabitants were tributary to him." It is observed by the same native chronicler, that the Lettgallians are of the greek religion; and that the Russians in several places baptized the heathens. In the year 1209 bishop Albert openly shewed the supremacy of the russian grand-princes, when in a treaty of commerce, which he entered upon through the teutonic knight Arnold, he gives security for the payment of the customary taxation, and in the year 1211, at the treaty of peace with Vladimir, he completely concedes the tribute.

Certain as it is, from these and many other indubitable testimonies, that the district inhabited by Lettes on the Baltic (or on the varagian sea, as the russian annals say) already belonged to Russia in the earliest periods of its monarchy; it nevertheless appears, that Livonia had then no settled constitution, nor was bound to the parent state by any firm political tie. Satisfied if the tributary nations only paid their tribute, the russian grand-princes, according to the custom of the age, left the civil constitution to the inclination of the Lettes, who therefore knew of no other magistracy than their elders, whom they still, from the flavonian term *Starf-china*, style *Starosts*: the russians even made no
opposition

opposition to the attempts of foreign conquerors, who were beginning to erect a new sovereignty here. Thus it happened, that these countries, particularly during the civil dissensions which preyed upon the vitals of Russia, gradually quitted their loose connection with that empire, and could not afterwards, notwithstanding the repeated efforts of the russian princes, be brought back to a re-union, till Peter the great revived the claim which belonged to his state from the very foundation of it in the true import of the word, and indeed by a transfer from the people.

To the rest of Europe Livonia remained generally unknown, till in the year 1158 it was discovered by some merchants of Bremen on their search for new branches of commerce towards the north. These mariners landed at the mouth of the Duna, opened a trade with the inhabitants, returned thither several times, and at length proceeded, with the consent of the natives, along the shore of the Duna, many miles up the country. About eighteen years after the discovery, an augustine monk, named Meinhard, settled in Livonia, who made the Livonians christians, and himself their bishop, whereupon many Germans at various times were induced to repair thither also. Towards the end of that century, Knut VI. king of Denmark, made an expedition to Esthonia, got possession of that province, and provided the converted inhabitants with priests and churches. For conquering and keeping Livonia, the bishop in the year

year 1201 founded the order of the Sword-brethren, afterwards called knights Templars, and granted them the third part of the country with all rights and sovereignty. These knights were all Germans, who converted the natives to christianity with great success, though not without bloodshed, and made them their vassals. They afterwards united themselves with the teutonic order in Prussia, to whom Valdimar III. king of Denmark, in the year 1386, sold Esthonia for the sum of eighteen thousand marks of standard gold. In the year 1521 the livonian heermeister Plettenberg again separated from the teutonic order, and was admitted by the emperor Charles V. among the princes of the german empire. The attempts made by tzar Ivan Vassillievitch II. to reconquer these provinces which had been torn from the russian empire, and the weakness of the order, which felt itself not in a capacity to resist so powerful an enemy, at length in 1561 effected the complete separation of the livonian state. Esthonia put itself under the protection of Sweden, Livonia united with Poland, and Courland was a peculiar dukedom under Polish supremacy, which the last heermeister Gotthard Kettler held as a fief of that crown.

From this æra Livonia became the unhappy object of contention, for which Sweden, Russia, and Poland, for an entire century, were continually exhausting themselves in bloody wars. During this period it had

had once nearly become a peculiar kingdom*; but Sweden at last got the upperhand, and, at the peace of Oliva in 1660, added this province to the possession of Esthonia. Both countries finally, after a war of twenty years, came to the Russians by the treaty of Nyftadt in 1721, and form at present the vice-royalties of Riga and Reval.

The events of the duchy of Courland till the year 1561, are interwoven with the history of Livonia, as, from the time of its conquest by the knights of the cross, it constituted a part of the livonian state. Gotthard Kettler, as above related, snatched from its ruins the new-erected dukedom as his proper spoil; and, from that period, Courland appears in history as a peculiar state. On the extinction of Kettler's male race the estates of Poland endeavoured to seize upon Courland as a lapsed fief, and to unite it immediately with the kingdom; but the courish nobility preserved to themselves, by the aid of the russian court, the right of electing a new duke.

* Among the attempts made by tzar Ivan Vassillievitch II. to obtain the sovereignty of Livonia, one was by making an offer to the Danish prince Magnus, in the year 1596, of this country under the title of a kingdom, reserving to himself the paramount lordship, and an inconsiderable annual tribute. This proposal was enforced by a russian army of twenty-five thousand men; and Magnus for a time actually styled himself king of Livonia. This project, however, by the war which broke out upon it with Sweden and Poland, terminated so unfortunately, that Ivan even lost his own possessions in Livonia, and Magnus obtained the bishopric of Pilten during his natural life.

Their choice in 1737 fell on count Ernest John von Biren, who was succeeded in the government by his son Peter. — As, on the total dissolution of the kingdom of Poland, the feudal connection with it fell off of course, and the duchy, in its declining condition, thinking it could not subsist without a more powerful patronage, the estates of the country agreed in the year 1795 by a free resolution * to consider the feudal constitution as demolished, and unconditionally to submit themselves to the empress of Russia. Their example was followed by the bishopric of Pilten which had stood immediately under the crown of Poland.

The fate of Polish Livonia is deserving of some brief notice here. This tract of country, which, under the government of the teutonic order, formed likewise a part of the livonian state, reverted in the year 1561, with the whole province of that name, to Poland. At the peace of Oliva, by which Livonia came under the sovereignty of Sweden, this sole district however remained to the polish state, retaining from that time its name in contradiction to swedish Livonia. On the partition of 1773, this country, which had hitherto constituted its particular voivodeship, was annexed to Russia, and now comprehends the two circles of Dunaburg and Re-
fitza in the viceroyalty of Polotsk.

We will now once more survey the tracts of the Russian empire which are inhabited by Lettes. The

* See Life of the Empress Catharine II. vol. iii.

homestead of this nation is not the whole of Livonia, but only a part of it which is called Lettland * ; the Kures in Courland, Semigallia, and the bishopric of Pilten are true Lettes ; by whom, in part, the lettish language is spoken in the greatest purity : but this people is mostly degenerated in polish Livonia, where they are mixed with Poles and Russians †. The number of them at present, for want of proper statements, cannot be accurately ascertained ; but in the viceroyalty of Riga alone, there were upwards of 226,000 Lettes, according to the last census.

At present they are no longer known as a separate people ; they were mingled by imperceptible degrees, and at last blended with the Lettes, the Esthes, and the Coures, or, as we usually call them, the Lettonians, the Esthonians, and Courlanders. The most visible remnant of them is at Salis, where, in conversation with others, in the churches and schools, they speak the lettish language ; but in their houses and among themselves they use the antient lievish. The Liefs that were some time ago discovered on the sea-shores in Courland have been thought, and not without reason, to be run-away boors from

* Livonia, or the present viceroyalty of Riga, consists of nine districts or circles, of which four compose what is properly termed Lettland. The remaining five circles are inhabited by Esthonians.

† Even the nobility, which, as in all the other parts of the antient livonian state, is originally german, has, under the polish supremacy, disused the german language, and adopted that of the Poles.

Salis. To conclude, in regard to their exterior there is now no visible difference between them and the Lettes.

The Lettes, or Lettonians, a people always peaceable, industrious, hospitable, frugal, and of somewhat better dispositions than the Esthonians, inhabited the greater part of the Venden district, and extended themselves even into Dorpat; and therefore it is, that the chronicles mention the Lettes in Ungannia. That they were at all times a nation entirely distinct from the Liefs and Esthes is evinced by their language, some particular customs, the general concurrence of history, and the implacable hatred of the two last-mentioned nations against them, which they were constantly exercising in scorn and oppression. That aversion even still seems not to be extinct; for the Liefs that live among them do not willingly intermarry with them, and the Esthes are very apt to deride and despise them.

Their origin has been at one time sought for among the grecian, and at others among the scythian tribes. Without meddling with the controversy whether they were formerly called Latzians, or were driven out by the Persians, we perceive by their language, that they are of affinity with the Courlanders, or Coures, and properly of lithuanian, or in general of flavonian origin. In their language we find a mixture of other people, as it contains many words borrowed from the russian, the polish, the

the esthonian, the german, and even some apparently from the latin; which may be accounted for from their derivation, their migrations, and their mixture with other people. At present they occupy two districts, which both together, after them, are called Lettland. By the augmentation they received from the Liefs, (now reckoned with the Lettes,) the Vendes, the Lettgallians, and the Esthonians, they are now more numerous than they were in the twelfth century. The Lettes call themselves Latweetis.

The Lithuanians live in the government of Polotsk and Moghilef: they, as well as the Lettonians, are intermixed with Slavonians and Finns, but chiefly with the latter, and are of the same confession of faith with the Poles.

SECTION II.

Finns.

A SECOND main stem of the nations dwelling in Russia is that of the FINNS, of which, though not one branch (the Hungarians excepted, if we choose to reckon them among them) has ever risen into a ruling nation; yet, as being the common stock of most of the northern nations of Europe, is exceedingly remarkable for its antiquity and its wide extent, from Scandinavia to a great distance in the asiatic regions of the north; and thence again to

the shores of the Volga and the Caspian. Dispersed as all the finnish nations are in this prodigious space, yet the resemblance, in bodily frame, in national character, in language, and in manners is preserved. It is scarcely less remarkable, that the generality of the finnish races still dwell only in the north, which has ever been their favourite abode, and on which account they are likewise called inhabitants of morasses or fens; and the chase and the fishery have ever been with each of them their chief occupation and trade. So great a resemblance seems to leave us in no doubt concerning the common descent of the nations that fall under this division of our work; which of them, however, is properly the parent stock, can hardly be decided. The aboriginal name FINNS already known to Tacitus, is in use with none of these nations; but they call themselves by a different appellation.

Uncertain as the proper and original denomination of this people is, not less obscure are also their origin and the early events that befall them.

None of these nations, some of them of very great antiquity, numerous and far extended, (the Magyares excepted,) has ever played a conspicuous part on the theatre of the world; no one of them has ever acquired a lasting independency, or produced a hero: but they have all, as far back as authentic history reaches, been a prey to their more enterprising and powerful neighbours. Accordingly they have no chronicles of their own; and their
history

history is only to be found in the annals of their conquerors.

On taking a survey of the whole extent of Scandinavia and Russia, which is stored with finnish nations, it is easy for the mind to conceive how the parent stem might come from the borders of Asia to the Baltic, then to have roamed along the northern coast of that sea, and to have spread on both sides of it deep into the south, till in process of time it penetrated, here by Lettes and Slavonians, there by german Scandinavians, far into the north. But probable as this hypothesis may be, few data for its confirmation are to be met with in history. It names to us, indeed, from the ninth and the twelfth centuries, the Permians, the Finns, the Laplanders, and a few other tribes, which now are no longer known, or at least solely by their names: but even of these we find only scattered accounts in the annals of the people who were concerned in trade with them; and the other finnish races on the Volga and in Siberia have not been discovered till the recent progress of the Russians into those parts. All therefore that is known of their antient history is this, that they possessed the greater part of Scandinavia and Russia in the north, and separated into several tribes, which either lived entirely without any government, or, like the Permians and proper Finns, under their own kings. — All these were gradually subjugated by three nations, under the

Y 2

dominion

dominion of whom they still remain: the Norwegians, the Russians, and the Swedes.

The NORWEGIANS were the first who subjected a part of the finnish north. Finmark has ever been tributary to them; yet it appears that long before the commencement of the tenth century, the whole tract from Vardhuys to the White-sea was independent of them; and that only the remoter Finns about the gulfs of Bothnia and Finland, and on the Dvina, obtained their national freedom. The enterprising Norwegians were not content with letting out the conquered countries to vassals, but they advanced to the independent districts, particularly to Permia, partly for the sake of commerce, and partly for the purposes of rapine and spoil. These expeditions to Permia, which in time became regularly made every year, were first checked by the incursions of the Mongoles into Russia, and at length entirely ceased, when the princes of Novgorod made themselves masters of that country, and the commerce of those parts.

The second nation which dispersed itself in the finnish parts of the north, were the RUSSIANS; who, though at first, on their settling about the Volkhof, lived on good terms with their neighbours the Tschudes or Finns, and even elected a government conjointly with them, yet they afterwards, later than the Norwegians, and earlier than the Swedes, conquered and subdued them.

Karelia,

Karelia, together with a part of Kexholm, seems to have been the first district of which the Russians of Ingria made themselves masters. Wherefore all the russian Finns, even such as neither in regard to their place of habitation nor their descent were Karelians, but not till a later period were mastered by the Russians, were formerly called by the Norwegians Kyrialians. The Russians at first had nothing but the region about the gulf of Finland, or on the Kyrialabotn, and about the Ladoga lake, quite up to the White-sea. They afterwards spread farther round in these desert countries, where nothing was fixed by stated limits, and subjected to them a part of Finland. On the incursion of the Mongoles, the expeditions of the Norwegians to Permia ceased: and now the Novgorodians began also to spread themselves farther to the north; and in the fourteenth century Permia was converted to the christian faith by bishop Stephen.

Probably at the same time some Permians fled across the White-sea to escape this fiery zeal for making profelytes; and thus gave the Russians, who pursued their fugitives, the first occasion for establishing themselves in Lapland. The latter now soon began to quarrel with the norwegian bailiffs, whose business it was to collect the tribute in these parts. They proceeded to acts of violence, and war began on the borders; when the Russians, who were nearer and more powerful, obtained the advantage. They took in the sequel, not only all Lappmark round Kola, but proceeded so far as to

levy a tribute on the Finns in the present Finmark, and on those who dwelt in Trumfen as far as Malanger. The other finnish nations in the east, on the Volga and in Siberia, became subject to them with their gradual extension in these regions, by the conquest of the tartar kingdoms and the discovery of Siberia.

The SWEDES were the last who founded a sovereignty in the finnish parts of the north. It was not till the middle of the twelfth century that Erik the saint subjugated and converted the proper Finns; a hundred years afterwards the Swedes set foot in Tavastland; towards the end of the thirteenth century they established themselves in Karelia; and about the same time the Laplanders were also reduced to their obedience.

Thus then the whole of the finnish north was partitioned among three sovereigns, and the nation itself was removed from the rank of independent people. — We now leave the stationary point from which we surveyed the whole of its territory, because henceforward there are norwegian, swedish, and russian Finns, and only the last are here the object of our attention. Of the thirteen tribes into which the finnish stock divided, twelve belong either wholly or in part to the inhabitants of the russian empire, namely, the Laplanders, the Finns, the Esthonians, the Livonians, Tschheremisses, Tschuvasches, Mordvines, Votiaks, Permiaks, Siryanes, Vogules, and Kondish Ostiaks. The Madshares alone,

alone*, the great mass of the mixed multitudes whom we at present call Hungarians, are the only finnish nation which belongs not to Russia, and also the only one that has preserved its national independence.

1. The LAPPES or LAPLANDERS inhabit the extremities of the scandinavian parts on the north-eastward to the White-sea, between the 65th and the 75th degrees of north latitude. Saxo Grammaticus, an historian of the twelfth century, mentions them first under this name, which signifies a forcerer, and was given them by the Swedes; having been formerly comprised under the general denomination of Quenlanders or Kayanians. They call themselves Sabme-ladzh, (in the plural number Same,) and their country Same-ednam.

The modern Lapland, a country abounding in mountainous forests and lakes, is divided into the norwegian, swedish, and russian Lapland. To Norway belongs the north-western, to Sweden the

* Magyar, as they call themselves, or Ugrians, as they are termed in the russian year-books, of which the modern Europeans have made Hungarians. — Schlœtzer reckons no more than twelve finnish nations, for he excludes the Tschuvasches from that stock, though he formerly joined them with it. Even this critical inquirer into history thinks the Finns an european parent-stock, (according to the interpretation which he gives to these words, *quos aliunde venisse nulla memoria est*,) as they possess almost the whole north of Europe, from Norway as far as the Ural; whereas the asiatic Finns seem to be only branches broken off.

southern, and to Russia the eastern part. According to the political distribution of the russian empire, russian Lapland forms only one circle of the viceroyalty of Archangel, the chief town of which is Kola, and is about a thousand versts in diameter. The number of the russian Laplanders, called by the Russians Lopari, amounts to not much above twelve hundred families. When and in what manner this people probably came under the russian government has been already noticed.

Schober, in his *Memorabilia Russico-Asiatica*, relates the story of a Laplander, who had lived some time at Astrakhan *. This Laplander, on account of his uncommonly capacious memory, was the wonder of his time. He had been privately stolen away from his native country, when very young, and brought up at Stockholm; Charles XI. sent him afterwards, with a considerable stipend, to Wittenberg, in order to study theology. It was thought he might be usefully employed as a missionary to preach the gospel to the Laplanders in their own tongue. Having finished his academical studies, he returned to Stockholm; where, on being examined at court, he was found to speak latin readily, though in general faultily. He preached without hesitation, but also without sense. The ministry of Stockholm thought him capable of undertaking, under the

* He is also spoken of by Weber, in *veranderten Rusland*, vol. ii. p. 165.

divine blessing, the work of conversion in his own country, and ordained him accordingly to make profelytes in Lapland.

The converter of the heathen being arrived among his countrymen, found that rein-deer-milk and dried fish were no longer to his palate. Scarcely had he been there half a year, but he mounted a rein-deer, forsook his miserable country, presented himself at Stockholm in the dress of a common Laplander, and got a few pence from the populace by making a show of his beast. Falling into extreme contempt by this degrading employment, he determined to repair to Denmark. About the year 1704, he made his entry into Copenhagen, sitting on his rein-deer, amidst a prodigious concourse of people. He was conducted to the presence of the king, to whom he gave himself out for a lapland prince: the people of the court made merry with him, and kept him generally drunk with wine and brandy. Under the same title he travelled into Germany, visited the principal courts, and was seldom sober. From Germany he proceeded to France, where, in one month, he learnt the french language, and received very handsome presents from Lewis XIV. Thence he returned to Germany; and then traversing Poland, he came into Russia.

He had been only six weeks in St. Petersburg, when he was able to express himself with tolerable facility in the russian language, even so as to preach in it before Peter the great, the archbishop of the province,

province, and the great officers of state. The emperor bestowed on him a yearly pension of two hundred and fifty rubles, and sent him to Astrakhan, in order to learn the tartarian language, which consisting of various dialects, is accordingly very difficult. He was actually master of it in a very short time so as to speak it fluently. But, living very loosely in Astrakhan, and being frequently seen lying asleep in the streets, drunk and senseless; he was one day taken up by the Kalmuks, and privately conveyed out of town. On his being brought before the khan Ayuka, the khan ordered his crown to be shaven in the manner of the Kalmuks, had him dressed in the kalmuc fashion, and gave him two wives, both of whom were soon pregnant by him. He had hardly been four weeks among these people, ere he not only understood them, but also in case of necessity would talk intelligibly to them. The Kalmuks gave him horses, took him with them on their hunting-parties, lived, ate, and played with him, and had not the slightest idea that he would ever quit them. But as soon as he saw an opportunity, he made his escape, and returned to Astrakhan.

In this place he afterwards made himself master of the persian, and the language of the subjects of the great Mongole; he also spoke the modern greek: but his dissolute life, and his daily drunkenness, cut him off in the flower of his age.

Saxo Grammaticus, who flourished about the close of the twelfth century, is the first writer that
speaks

speaks of this country and its inhabitants ; but, says M. de Voltaire, it was not till the sixteenth century that we began to get any rude knowledge of Lapland, concerning which even the Russians, the Danes, and the Swedes, had but very faint notions.

This vast country, bordering on the pole, had only been noticed by the antient geographers under the names of the country of the Cynocephali, of the Himantopodes, of the Troglodytes, and of the Pygmies. Indeed we have learnt from the accounts given by both swedish and danish authors, that the race of Pygmies is by no means fabulous ; for, that they had found them near the pole, in an idolatrous country, covered with mountains, rocks, and snow, and overrun with wolves, elks, bears, ermines, and rein-deers.

The Laplanders, (continues M. de Voltaire,) from the universal testimony of travellers, seem to have no relation to the Finns, from whom they are made to descend, nor from any of the neighbouring people. The men in Finland, in Norway, in Sweden, in Russia, are blonds, large and well made ; Lapland produces none but men of three cubits in height, pale, swarthy, with short, harsh, and black hair ; the smallness of their head, their eyes, their ears, their nose, their belly, their thighs, and their feet, distinguish them entirely from all the people that surround their deserts.

They seem to be a particular species formed for the climate they inhabit, which they love, and which they

they alone could love. Nature, who has put reindeer no where but in this country, seems to have produced the Laplanders there; and, as their reindeer are not in being elsewhere, neither do the Laplanders appear to have come from any other country. It is not probable, that the inhabitants of a country less savage should have forced their way over mountains and deserts of ice, for the sake of transplanting themselves in regions so barren, and so dark, that it is impossible to see clearly for three months in the year, and where the inhabitants must be perpetually changing their stations, in order to find the means of subsistence. A family may be thrown by a tempest on a desert isle, and may people it; but it is not natural to quit habitations on the continent which produce some nourishment, to go and settle a great way off, upon rocks covered only with moss, in a dreary region of incessant frosts, amidst precipices of ice and snow, where there is no food but reindeer's milk and dried fish, and debarred from all commerce with the rest of the world.

Besides, if the Finns, the Norwegians, the Russians, the Swedes, the Icelanders, people as far to the north as the Laplanders, had emigrated to Lapland, would their figure have been absolutely changed? It should seem then that the Laplanders are a new species of men, who for the first time presented themselves to our view and our observations in the sixteenth century, while Asia and America offered to our sight such numbers of other people, of whom

we

we had no great knowledge. Thenceforward the sphere of nature has enlarged itself on all hands to us, and it is therefore that Lapland is become an object truly worthy of our observation.

But to this it may be replied, that, if the natives of Lapland were of a different species from other men, we must admit the eternity of matter with the men born in different countries, and begotten by others, without being able, whatever retrogradations we might make, to discover their first generation, unless we have recourse to the fiction of the poets, for a people

qui rupto robore nati,

Compositique luto, nullos habuere parentes.

The information contained in the writings of Moses apparently shews that these systems, with those that the antient philosophers have invented, on the origin of the human species, are so many fond conceits and falsehoods.

The greatest difficulty lies in knowing how the children of Adam and Eve, who were white, could possibly have given birth to black men. But this difficulty has been solved in the preliminary dissertation to the Universal History, and in that of M. de Maupertuis on the white negro. They prove that the difference and the diversity of climate, a greater or less distance from the sun, &c. have produced this effect; and it is what experience confirms, at least by analogy.

2. The

2. The FINNS, in the stricter signification, were already known by this name to Tacitus, which has been preserved by the geographers and historians of later times, though without any accurate knowledge of the people. Properly they were not again discovered till the year 1157, when the swedish king Erik, the saint, undertook their subjugation and conversion. They call themselves in their language Suoma-lainen, i. e. people who live in Morasses; and their country Suomen-Sari, which signifies a marshy country with islands. Whence the name Finns arose is unknown*. By the Russians they are denominated Fini, but more usually Tschuchontzi or Maimisti, nasty people. The Ingrians, a particular description of finnish boors who have long dwelt amongst the Russians, and have adopted many of their customs with their language, as well as the greek religion, are still called in rufs Ishorki, from the river Ishora or Inger, from which Ingermanland or Ingria has its name. They live likewise in the neighbourhood of Valday and Beyetsk, and are generally of the lutheran communion.

The country which is inhabited by this nation comprises the north-eastern corner of the Bothnic and Finnish gulfs, interspersed throughout with rocks, mountains, morasses, and lakes, between the 60th and 65th degrees of north latitude, its circumference being computed at thirty-thousand versts. The greater part of it belongs to the king-

* So says Schloetzer. Geørgi is of opinion that this is the gothic translation of Suoma.

dom of Sweden ; the smaller south-eastern portion, possessed by Russia, contains Ingermanland, Kexholm, and Kárelia, forming the government of Vyborg, and part of that of St. Petersburg. — That the Finns, in a very remote period, lived under their own kings, has been already seen, as well as that the Russians very early got firm footing here, and formerly possessed far more than their present share. In after-times these territories were again lost ; and Mikhaila Romanof ceded to Sweden the last russian possessions in Finnland ; but, by the treaties of Niestadt and Abo, Russia got back the forementioned part of it.

In the government of Vyborg the Finns make by far the greater part of the inhabitants, or more properly they are the people of the country. In most of the circles of the Petersburg-government, they, with the Ingrians, are likewise the main body of the population ; and in the governments of Tver and Novgorod they form considerable colonies, which have long been settled in these regions. The number of all the Finns living in Russia is not to be correctly ascertained ; but they probably exceed four hundred thousand heads. — This people and the Laplanders are moreover the only two finnish nations, whose lot has been cast under several sovereigns ; all the other branches of this stock belonging exclusively to the russian empire.

3. On the southern coast of the gulf of Finnland, over against Finnland proper, dwell the Est-

HONIANS.

HONIANS. This name, of like import with orientals, is of german origin; many other nations of the Baltic bore it; by Tacitus and Cassiodorus it is employed to denote the borderers on the Amberstrands: at length, however, it was confined to designate the small tract of the forementioned coast. The Esthonians have no name for themselves collectively, but supply that defect either by *Maa Rahvast*, people of the country; inhabitant (in the singular number, *Maa Mees*); or if they would speak more particularly, *Tarto Rahvast*, *Perno Rahvast*, people of Dorpat, of Pernau, &c. * In the russian annals, where they play a considerable part, as they, in common with the Novgorodian Slavi, founded the russian state, they are called *Tschudes*. From them to this day the Peipus lake is called in rufs *Tschudskoie ozero*, the *Tschudish lake*.

That also this people, in the remotest times, belonged to the russian monarchy, is beyond all doubt. During the intestine commotions with which the grand-princes had to contend among them, the *Tschudes* indeed gradually succeeded in withdrawing themselves from this sovereignty; but, we also learn from history, that the russian princes at several times found means to assert their right with vigour, and to compel the Esthonians by force to acknowledge it. Thus, for example, Yaroslav found himself under the necessity of waging war upon the

* The Finns are called in the Esthonian, *Somè Rahvast*, or *Somlanè*.

Tschudes,

Tschudes, and in the year 1030 to build Dorpat, (or Yurief, as the Russians still call that town,) that he might have a strong place in the heart of their country, for the reception of the imposts, and perhaps for keeping a garrison in it. So Mstislaf marched against the Tschudes and Semgallians, on his reviving his demand of the tribute which they had been wont to pay: likewise in the annals of the neighbouring nations we find frequent evidence that no one ever doubted of the supremacy of the Russian princes over these countries.

The most remarkable of the catastrophes that befel the Esthonians have already been noticed in the history of the Lettes. Since the year 1386, when Esthonia was sold to the Teutonic-order, it has formed a part of the Livonian state, with which, after a separation of a hundred years, when it was under the dominion of Sweden, it again fell to the latter, and afterwards was united to the Russian territory. The antient duchy of Esthonia forms, in the present constitution of the Russian empire, the government of Reval; not only this province, however, but also the greater part of Livonia, or five circles of the Riga-government, are inhabited by Esthonians. Their numbers in the former government can only be probably computed at one hundred and eighty-thousand; in the latter, by the last enumeration, were upwards of two hundred and fifty-seven thousand heads. We shall certainly

therefore not be mistaken in stating their total amount at four hundred and thirty thousand.

4. The LIVONIANS are, by some antiquaries, classed as a peculiar nation of Finns, while by others they are comprehended among the Esthonians*. The annalists Nestor and Henry the Lette distinguish them as a separate nation, and both agree in testifying, that in the very earliest periods they were among the tributary tribes to the Russian empire. At present they are only in small remnants in two different places: in Courland on Angers-strand, making a tract of ninety miles, where they consist of about a hundred and fifty families, and in detached parts of the Riga-government. As divine service is now performed among the remains of this people in the Lettish language, their own is gradually going out; and perhaps by the end of the next century not a trace of the Livonians will be seen.

5. One of the most remarkable nations in the Finnish history are the PERMIANS; or, as they are

* Schlœtzer takes them to be the remains of the primitive inhabitants of Livonia, or a branch of the Finns; but in this case it must be presupposed that the Finnish nations were once in possession of Lettland and Courland, and were driven out by the Lettes, when only this small body of Livonians remained in the country. — Friebe, (in his history of Livonia, Esthonia, and Courland,) from their language and way of living, judges them to be real Esthonians, who have kept themselves unmixed among the Lettes; which may easily have happened from the hatred entertained by the two nations against each other. Their dialect is purely Esthonian with some small mixture of Lettish.

called in the icelandic Reports, Biarmians, who are denominated by the Russians Permiaki, and whose present homesteads are in the governments of Perme and Viætka, and in the northern districts of the river Oby. It should seem that the scandinavian navigators in the middle ages gave the name of Biarmia to the whole country between the White-sea and the Ural. The Permians on the Dvina were discovered in the ninth century by Othere of Halgoland, a province at the extremity of Norway, who afterwards entered into the service of Ælfred the great, and drew up an account of this voyage in the anglo-saxon language. The icelandic reports are likewise full of these people.

According to these Reports the Permians on the White-sea and the parts about the Dvina were the most wealthy, the most powerful, and most remarkable of all the northern Finns. Here the carved image of the god Yummala had its far-famed temple*, the description of the magnificence whereof borders on the marvellous, and has been evidently drawn up by a rude but warm imagination. According to these descriptions the temple was very artfully built of costly wood, and so richly ornamented with gold and precious stones, that it threw a radiance round the whole circumjacent country. The image of the god had on a golden crown set with twelve precious stones; a necklace,

* Yummala is the universal deity of the Finns, as Perune was of the Slavonians and Lettes, and Othin or Odin of the Germans.

which in value amounted to three hundred marks in gold, and a dress which outweighed the lading of three of the richest ships that navigated the grecian sea. Lastly, the figure bore on its knees a golden chalice of such capacity, that four men might quench their thirst from its contents, and this vessel was filled with the same valuable metal of which its mass consisted. — The report of these extraordinary riches it was that tempted the northern freebooters to make armed expeditions to these distant parts and to quarrel with the natives; it was considered too as an honourable atchievement and an heroic adventure to have brought off some spoil from this temple. From Halgoland expeditions were made thither every year; even several norwegian kings went on predatory excursions to Permia, and usually returned with rich booty. We also find that scandinavian mariners visited this country for the purposes of trade alone, and without any piratical views.

Supposing these fabulous descriptions of the magnificence of Yammula's temple, and the great wealth of the country to be not entirely destitute of all foundation, as we may with great probability, it then merits inquiry in what manner the permian Finns accumulated so much gold, and how their country became the mart of a great and lucrative commerce. In very remote ages the Permians were already famous for their trade with the Persians and Indians. These nations brought their commodities over the Caspian, up the Volga and the Kama, to

Tscherdyn, a trading town of antient date on the river Kolva; and the Permians transported these goods as well as their own products, along the Petschora to the Frozen-ocean, where they bartered them with the people of those parts against furs for their oriental trade. — The ruins of antient towns still bear witness to the flourishing condition and the civilization of this people.

By the historical traces still subsisting, we perceive then that the Permians were the only race of the Finns who were a polished and commercial people and known to other nations, while the rest of their kindred tribes lay dormant in the deepest barbarism. — The Reports likewise speak of kings and a sort of political constitution in Biarmeland. Many of these kings, if indeed their existence were historically ascertained, seem to have been, not natives, but scandinavian corsairs, as their names also intimate. These at various times subdued as well the Finns as the Permians, and afterwards remained in these countries.

With the year 1217, the expeditions of the Norwegians to Permia cease*; at an earlier period,

* Nearly about the same time, though somewhat earlier, the first incursions of the Mongoles or Tartars into Russia happened. That this circumstance occasioned the scandinavian pirates to abandon their predatory expeditions to Permia is by no means probable; for, besides that a later event can never be the cause of an earlier, the depredations of the Mongoles were principally confined to the southern parts of Russia, and it is nowhere to be seen that they penetrated even to Novgorod, much less so far as Permia.

however, and probably in the eleventh and twelfth centuries, the republic of Novgorod made itself master of this country, sending thither russian colonies to keep the inhabitants in subjection. About the year 1372 the christian faith was propagated in Permia by bishop Stephen. At the close of this, or the opening of the following century, a dispute arose about the possession of this country between the city of Novgorod and the grand-duke Vassilly Dmitrievitch, which at length was terminated by a compromise, in which it was agreed that the Novgorodians should renounce all claim to it. The Permians now maintained for a length of time the liberty of chusing their rulers from their own body. Tzar Ivan, in 1543, gave them the first viceroy, to whom the chief of the inhabitants were to act in a subordinate capacity in the affairs of government, and who had his seat first at Kolmogor, and afterwards at Archangel. — At present the whole of antient Biarmia, the borders whereof cannot now be accurately defined, is divided into several governments ; and the descendants of the Permians, heretofore so famous, numerous, and powerful, are dwindled away to an insignificant remainder, who, amidst thorough Russians, have lost almost all their national characteristics, even to their very language.

6. Near and among the Permiaki dwell the SYRIÆNES, in the district of Ustyug-veliko, in the governments of Vologda, of Perme, and Tobolsk,

These

These people call themselves, as well as the Permians, Komi or Komi-Murt. Their language, which they have still preserved, much resembles the permian, and is nearly related to that of the Finns ; in religion, mode of life, and manners, they have approached so near to the Russians, that they are scarcely any longer distinguishable. In the fourteenth century, they, together with the Permians, were brought to the christian faith.

7. The VOGULES inhabit the western and still in a greater degree the eastern part of the northern Ural, and nomadise chiefly about the rivers which unite with the Irtysh and the Oby to the Frozen-ocean, or with the Kama and the Volga into the Caspian, therefore principally in the governments of Perme and Tobolsk : they call themselves * Voguli, and are denominated by the Russians Vogulitschi. According to their traditions, their home has always been where they reside at present : they came under the russian sovereignty previous to the conquest of Siberia, at which time they were so brave and warlike a nation as to give the Russians some difficulty in reducing them to their obedience. For some time they were thought by the latter to be the same people with the Ostiaks ; documents however are in being, upwards of three hundred years old, in which

* According to M. Georgi they denominate themselves Mansi.

they are specified as a distinct nation*. All the stems of the Vogules, dispersed in various districts, taken collectively, compose a numerous nation; but accurate statements of their population are not to be had. The Vogules nomadising in the circle of Tscherdyn, in the government of Perme, amounted in the year 1783 to no more than a hundred and eleven persons, composing nine families, and so nearly related in consanguinity, that they were obliged to fetch women to be their wives from other races.

8. The VOTIAKS or Votes, upon the river Viætka, in the governments of Viætka and Ufa, call themselves Ud or Udi (which seem to be the same with the russian Voti), also Mord, i. e. Man or Udmord. Living but little intermixed with other people, their language continues to be a pure finnish dialect. God is with them Yumar, and with the Finns Yummala. They have still retained their old distribution into stems, and give their villages additional names accordingly; their noble families

* In the Steppennaia knigi, for example, we find the following passage: "In the year 7007 (1), the grand-duke Ivan Vassilievitch sent his troops into the Ugorian country against the Gogulitsches; and they went and took their towns and their country, overcame their princes, made them prisoners, and brought them to Moskva. The rest of the Ugres (2), and Gogutitsches (3) they slew, &c."

(1) 1498.

(2) Yugrians, whence the Ural and the Yugrian mountains have their name.

3) Vogulitsches.

are

are however partly extinct and partly mingled with the populace. They were formerly under tartar protection; but on changing their old masters for the russian sovereignty, they also quitted their pastoral life for the occupations of settled husbandry, and turned their tents into permanent houses. — Their number is not inconsiderable; in the government of Ufa there are about fifteen thousand, and in that of Viætka thirty thousand males.

9. The TSCHEREMISSES dwell in the government of Viætka, Kazan, Simbirsk, and Ufa, on both shores of the Volga, especially the left. They call themselves Mari, i. e. Men. Although their language be mixed with tartarian and russian words, it is easily distinguishable as a finnish dialect. The Supreme Being they call Yuma. — At the time of the Tartars they were subject to them, and dwelt more southernly between the Volga and the Don; at the downfall of the tartarian dominion they fell to the russian empire, and even in this state they long retained their own khans, which, however, ceased upon the extinction of the princely race. They were formerly a pastoral people; but, under the russian government, they are gradually become husbandmen. The present amount of them is not known; they have, however, been estimated at twenty-thousand.

10. The TSCHUVASCHES, who also denote themselves by that appellation, are a very numerous nation, paying the tax for more than two hundred thousand heads.

heads. They reside principally on both sides of the Volga, and are in the governments of Tobolsk, Viætka, Nishnè-novgorod, Kazan, Simbirsk, and Ufa. Their language at present borders more upon the tartarian than on that of the Finns; and therefore some historical inquirers will not even allow them to belong to that stock: nevertheless they have in their manners and customs a great similarity with the generality of the Finns, particularly with the two last-mentioned nations, the Votiaks and Tscheremisses. These three tribes dwell together in villages, but never in towns; they are inured to agriculture, and have abandoned the nomadic way of life: they are fond of horseflesh, are mostly heathens, have inchanters among them, and a sort of place for divine worship, which they denote by the generic term Keremet. At their meetings they sacrifice a horse, in which their principal religious solemnity consists.

11. The MORDVINES are by the Russians called Mordva, and dwell on the Oka and Volga, in the governments of Kazan, Nishnè-novgorod, Ufa, Simbirsk, and Penza. Though not so numerous as the Tscheremisses and Tschuvasches, they are yet a very considerable nation, which has been found to increase on every successive enumeration, and divide themselves into two main stems, Mokshan and Ersan; by which they are peculiarly named, though the general appellative of Mordva is not unusual

unusual even among themselves. This nation, in the opinion of several russian antiquarians, is the same which Nestor mentions under the names of Meres or Merænes, on occasion of the national confederacy entered into by the five flavonian and finnish tribes on the lake Ilmen for the founding of the russian state, and who at that time inhabited the districts of Rostof, Halitsch, Kostroma, and Yaroslaf*.

12. The last nation of the Finns that remains for us to mention are the OSTIAKS OF THE OBY.—On the conquest of Siberia by the Tartars, they contemptuously called all the inhabitants of this extensive country, of which, however, they knew but a small part, *Uschtyæk*, a word denoting a foreigner or barbarian. This denomination was at first retained by the Russians from ignorance, and has since been lost in proportion as the diversity of the siberian nations has been detected. However there remain at present three very distinct people both in descent and language, the Ostiaks of the Oby, of the Narym, and of the Yenissey. Only the first of these three tribes belong to the stock of Finns.—The Ostiaks of the southern Oby call themselves *Astyaks*, from the river Oby which in their language is called *Yak*; the northern, *Khondi Khui*, people of *Konda*, because they withdrew from that river towards the north. Both stems dwell at present about the Oby and the Irtysh, in

* See the article Russians, and the note, p. 269.

the government of Tobolsk, and derive their origin from the Permians*, from whom they probably separated to avoid bishop Stephen's barbarous zeal for making converts. If this derivation were as certain as it is probable, from the similitude of the languages, they must surely have had some weighty motive for quitting their mild and gentle sky on the west side of the Ural for the inclement regions of the Oby. — The Ostiaks of the Oby are held to be one of the most numerous of the Siberian nations, but accurate statements of their population are not known.

From the generality of these nations of Finns, but especially from the Tschheremisses, the Tschuvasches, and the Votiaks, a mongrel horde has arisen, which has been increased by Tartars, and at present may be regarded as a peculiar tribe. The Russians have given them the name of TEPTERI, a word originally tartarian, and denoting a man who cannot pay his taxes. The Tepteri were formed in the middle of the sixteenth century, during the dissolution of the kasan-tartarian empire, and established themselves at first in that part of the Ural-mountains which belongs to the government of Ufa. At present they are so much intermingled that their origin is scarcely discernible. They are found to be more numerous at every succeeding

* Their language comes nearest to the permian, and next to that to the vogule.

census; in the year 1762 about thirty-four thousand of them paid the imposts.

Of the Finlanders, Esthonians, or Æstiers, together with all the flavonian tribes, in those times known only by the appellation of Sauromates, or northern Medes, of which nation they either were or pretended to be the descendants, as also of the Goths, the Romans scarcely knew any thing but the names. Norway (*Nerigon*), Sconen (*Scandia*), *Dunney*, and *Væræ* were, according to them, islands lying near the Frozen-ocean, as well as Thule, whither they used to sail from Norway, as well as from the northernmost point of Scotland. These obscure notions of the Romans respecting the geography of the northern nations are consequently also very incoherent, and of no manner of use. — Pliny expresses himself thus: Sunt qui et alias (insulas) prodant, Scandiam, Dumnam, Bergos; maximamque omnium Nerigon, ex qua in Thulen navigetur. A Thule unius diei navigatione, mare concretum, a nonnullis Cronium appellatum. Lib. iv. cap. 16. It is evident, says Mr. Reinhold Forster, that the whole coast is meant here; and though the learned Schloetzer, whose information on these points is universally respected, in his “Introduction to the universal history of the north,” an excellent work, chooses to understand by Bergos one of the two sons of Hercules mentioned by Pomponius Mela, viz. Albion and Bergion, who gave the names of Albion and Bergion (or *Ouegva*, Juverna,

Juvena, Hibernia) to the british islands ; yet I cannot persuade myself to take it in this light, as it seems more probable to me that the appellations of Dumna and Bergos belonged to the islands Dumnæ or Dumney near Halgoland, and Vœroë near Malstrom, for the continued series in which these countries are disposed seems to render this supposition in a manner necessary. For the same reason, I should never think of looking for Thule in Iceland, but rather in Shetland.

THE ESTHES or ESTHONIANS, in the lettish language IĒGAUNIS, have ever been the most extensive and the most populous nation of Liefland ; who, besides Esthonia properly so called, inhabited the districts of Dorpat and Pernau, and still maintain their settlement in them to this day. They even made frequent attempts to get firm footing in Lettland ; but they were as often repulsed by the Teutonic order of knights, under their master Volquin, who repeatedly drove them back to their antient seats. Their language, manners, bodily figure, houses, methods of husbandry, are so many incontrovertible proofs of their relationship to the Finns ; whom M. Schlœtzer justly pronounces to be one of the most far-spread nations of the globe, inhabiting, from the shores of the Baltic, to regions deeply situated in Asia. It is therefore no wonder that some Livonians have found nations in the heart of Russia, whose speech, by the help of some acquaintance

ance with the Esthonian, they could partly understand ; since the Finns, the Laplanders, the Esthonians, Livonians, Permians, Syranes, Ingrians, Votiaks, Tschuvashes, Tschermishes, Mordvines, and others, are described as nations of one common pedigree. The Esthonians are the Tschudi ; from which appellation perhaps is derived the word Tchuchna, still used by the Russians to express a liefland boor.

Their conversion, or more properly their compulsion, cost the Germans much labour. Accustomed to war, to piracy, and to liberty, they long disdained and resisted their insolent authority. Some sparks of that martial spirit, now almost extinct, shew themselves, however, at times, in their fits of ebriety and revenge ; and a relict perhaps of their old disposition to piracies and hostile attacks on the neighbouring provinces may be seen in their present propensity to theft.

Great wisdom is not to be looked for among folks entirely occupied in the affairs of agriculture, pasturage, and fishing. Neither the esthonian nor the lettish languages have as yet been unfolded and enriched by art or science ; they are greatly deficient, especially the esthonian, in particular expressions ; so that it must often be a difficult task to a village-preacher, to publish an edict in a faithful translation, or to deliver a dogmatical discourse to his parishioners, unless he be peculiarly endowed with the grace of condescension. Many a boor would accept of freedom with heartfelt gratitude ;
but

but neither gratitude nor freedom can the Esthonian express in his language ; no more than he can existence, duration, space, and other abstracted ideas. Among them are found persons of great simplicity, especially such as live apart in the forests : the greater part are artful, (the Esthonian more than the Lette,) easily comprehend a proposition not lying too far beyond their sphere, and frequently discover unexpected capacities only waiting for an occasion to call them forth. Those on the sea-coast have always been able seamen, who, without previous instruction, venture far out to sea, in vessels of wretched construction. In a short space of time, often within the compass of three or four weeks, they learn to read, and are dexterous in stealing an art from the german mechanics ; accordingly we find among them goldsmiths, ship-builders, tanners, expert cooks, huntsmen, &c. Under the swedish government, when the country was roused to support the feudal banner, they were useful soldiers. At the beginning of the eighteenth century, according to the current report, a boor of the district of Dorpat raised of himself a regiment, and signalized himself so much at the head of it, that he received a patent of nobility, with a haak of land, as the reward of his generosity and valour. Several have obtained baronies and military rank for their services in war ; or, having successfully applied themselves to the sciences, have been put into various offices : persons of great consideration
are

are now living, whose fathers or grandfathers were alienable boors. Very few lords will allow their boors to learn to write; fearing perhaps they may abuse that talent: they might be tempted to forge a passport or letters of emancipation. Some therefore teach themselves to write, without any help from others; and even under the total want of that art, they can keep, in a most surprising manner, long accounts of a hundred various matters, on sticks or tallies. About things of which they do not directly see the utility, they seldom give themselves any concern; and what they do not comprehend they admire but coldly. Children that are early become orphans scarcely know, at the age of twenty, the names of their parents. It is too much the custom for school-boys to offer their pastor some flax, butter, or honey, to let them soon out of school, and not force them to learn to read; to which end they are likewise very apt to feign all sorts of infirmities, such as hardness of hearing, dimness of sight, weak memories, &c. but especially of pretending to have a great fall or a blow on the head. These and the like pretexts, however, become less frequent from day to day by the present scholastic institutions, and will entirely be removed when there is a school in every village, or every farm shall instruct its own children. To send little children four or five miles off to school with their provisions in their pouch, is too much for the poor vassal, who has scarcely the means for finding them

in necessary clothes ; grown up lads have no time to spare for school, and would get the worse for sitting still, to which they are not accustomed. A knowledge of the moral duties of religion, suited to their capacities, is soon obtained by old and young ; yet however it be, scarcely two in a thousand can tell whether they be christians or not ; unless it arises from this, that they are taught to conceive of religion as something different from the leading a good life. The proverb in use among them, " He knows " not what faith he is of," does not merely imply a completely stupid fellow ; for they would all reply that they are of the country-faith, or of the parish-faith. Those who live among the Russians, on the borders, frequently adopt their domestic and ecclesiastical usages from them.

In Esthonia are a great many large villages, some containing from forty to seventy little clans ; and with the stragglers may amount to a hundred distinct households : most of the Lettes live separate. Even the Esthonians at times shew a hankering after this primitive way of life, by which they are not exposed to the inconvenience of keeping every one his own cow-herd, and at least an old woman to look after the housekeeping ; on the contrary they are less confined, have fields, meadows, and pastures near them, and suffer no damage from their neighbour's cattle. They have a particular affection to the woody districts, both for the sake of having a supply of firewood at hand, and an opportunity of clearing

clearing new fields whenever they please. One of these stragglers, or hedge-boors as they are called, will not easily be persuaded to come and live in a village at a distance from a forest, though offered a far more fertile soil to cultivate, because there they can unobserved be continually laying out new ground in corn and hay fields, without paying any thing for them. Inferior landlords, who exact but little work from such people, run the risk of soon perceiving a want of stewards; and there have been instances of their letting the estate go to ruin, or even setting their houses on fire, in order to have a pretence for turning straggler and enjoying the conveniences attending that way of life. For in that case they only work two days in the week at most for their lord; the rest of their time is spent in idleness, or in working for their own profit: but in general they will only work when pinched by hunger, and the steward must give them, for small service, a piece of copse, beside finding them in meat and corn. To impose much work on the straggler seems, on the other hand, very cruel, as he has no land from the manor, and must maintain himself and his children by his own labour. They and their children are sometimes sold, or bartered against other things, horses, dogs, tobacco-pipe heads, in which the gentry here are very curious, as far as a hundred rubles being often given for one. A man here will not fetch so much money as a negro in the West-Indies: one buys a fellow here for thirty to fifty rubles; if he understand any business,

business, shoemaker, taylor, cook, weaver, &c. he may sell for a hundred rubles; you will pay about the same rate for a whole clan, one with another, the parents with the children; for a stout girl seldom more than ten, and for a child it may be four rubles.

Whether the proper names that appear in their old chronicles be the appellatives of entire casts or races, or of individuals, I cannot take upon me to determine. The fondness that many boors have for naming themselves after the piece of ground possessed by their forefathers for a long time, or at least to retain the father's name, seems to favour the supposition, that a kind of family-name was not formerly quite unknown to them: perhaps, if it were of any consequence, we might find them again in the names of different villages and farms, from which, as well as from animals, &c. they seem to be borrowed. Proper family-names, as we now bear them, nobody will expect to find in Livonia earlier than the twelfth-century. At present the baptismal name always stands last; that of the farm, the father or the landlord first: for example; an Esthonian of the name Mik, living at a place called Mutta, calls himself Mutta Mik; his son bears the name Mutta Mikko Pong*, and his son, Mutto Mikko Pong Rein; and so his daughter, servant, step-son, &c. The vassals change their name with every new landlord, or call themselves after

* Son.

their fathers. Even a farm-holder must change his name whenever another plot of ground is given him to cultivate, unless he receive express permission from his lord to retain the old, or his father's name. Vassals that are made free commonly take a family-name, borrowed from their former place, or their father's: for instance; Hans, the son of Hunti Laur, is made free. He now assumes the name Hans Hunt; or, because the latter word signifies Wolf, Hans Wolff, or Hans Laurson. Their usual christian names, among others, are:

	Esthnish.	Lettish.
Adam	Adam, Ado, Oado	Adam
Agnes	Neto	
Anthony	Tœnnis, Tœnno, Tœns	Antins
Anne	An, Anno	An
Barbara	Warbo, Papo	Babbe, Babba, Barbel
Bartholomew	Pærtel, Pert, Pero	Behrtuls, Behrtmeis
Brigit	Pirrit	Birte, Brihte
Daniel	Tanni	
Dorothy	Tio	Dahrte
Elizabeth	Ello, Els, Liso	Ilse, Lihs
Eve	Eva	Yeva
George	Yurri	Yirri, Yurris
Gertrude	Kert, Truto	Geddo, Gehrte
Hedwig	Edo	Edde
Hellen	Iæno	Lena
Henry	Hin, Hinno, Hinrik	Indriks
Jacob	Yakob, Yaak, Yoak	Yehkobs, Yahke
John	Yaan, Yoan, Yuhan, Hans	Ansis, Antzis
Katharine	Kai, Kaddri, Trino	Katrihn, Trihne, Katsha
Charles	Kaarl, Karel	Karl

	Esthnish.	Lettish.
Magdalene	Madli, Madle, Mal	Magdalena, Lena'
Mary	Mai, Marri, Marret	Marri
Margaret	Kreet, Krææt	Kret, Mahrgeet
Peter	Peter, Peet, Peeto	Peet, Peter
Sibyl	Pil	Bille.

The masculine appellatives, Koort, Pell, Kæært, Tin; and the feminine Kell, and one very common in some places, Eile, in Esthonia; and the Lettish, Lashe, Ebb, which some interpret by Lucia and Ebertina, I do not presume to translate.

Rich boors would be sought for here in vain. Such as (in secret) possess a few hundred rubles in hard cash, with moveables to the value of a hundred or two more, are here and there to be found; they even sometimes are worth more than their masters; but then they must not let it be known. Some have just enough to satisfy the first wants of life; but still more are poor. Formerly they were all much better provided. Among the Lettes, the landed property is not divided into small estates, but remains in the hands of a few overgrown nobles, who, living in great opulence, neglect to look after the management of their country possessions, so that the produce of them does not amount to one third of what, with moderate attention and care, they might, to the great detriment of the proprietor himself, to the state at large, and to the poor peasants, who, though for the most part, more industrious than the Esthonians, are generally in the extremest poverty. The latter neither want land nor an opportunity

portunity of making money, if they have but time and inclination. The day-labourer, all the winter through, can earn his ten kopeeks, and even more, by cutting wood and other employments, and in harvest time may get weekly a couple of bushels of corn. The forests, the breeding of cattle, the towns, the manor-houses, the chace, and agriculture, furnish them with opportunities enough for earning something. Only by spinning for pay, the females find but little advantage; and yet in winter there is scarcely any thing else for them to do: in the worst parts of the country they grow as much flax as will keep them in work during the whole of the long winter. The Esthonian has often been reproached with laziness: charity might lead us to suppose that bondage and oppression may have an influence on him, as well as on the Lettes; but he shews it even when working for himself: perhaps his feudal service habituates him to it. And yet, both in town and country, there are great numbers who shew themselves industrious, and pursue their own benefit with activity and diligence. The failure of a crop, diseases among the cattle and horses, soon reduce a boor to poverty; whom all the assistance he can get from the manorial mesuage will not restore to his former condition. A man may have two horses and a few cows, and yet be very poor. How wretched are even they who are called landlords, or hosts, of the farm, who have nothing but a horse lent them from the manor!

Creditable boors possess, according to the quantity of their ground, from five to ten horses, and a herd of between thirty and forty head of horned cattle. Both poor and rich eat chaff-bread, that is, without separating the chaff from the rye; after threshing, they grind and bake them both together. In those parts of the country where the ungrateful soil rewards the labourer with but a sorry crop, or the arable land is allotted the people in too great a disproportion, both the Lettonians and the Esthonians feed on the vilest bread imaginable, fit for nothing but to burn, for it takes fire immediately on application to it: it is only on holidays that they bake a little bread of wheat or cleansed rye, but never bolted. When their spirits and their pride are elated by strong liquors, or sometimes when they have a good-natured master, they are apt to betray their property, which at all other times they do what they can to conceal, lest their work should be increased, or, after their death, an unwelcome hæres universalis ab intestato should come in for at least an equal share with their children, which, it is to be hoped, does not frequently happen in our enlightened days.

None of the people here are comparable to the german peasants in muscular force, particularly as to lifting or carrying burdens, which, perhaps, may be owing to their habits of laziness, and their miserable diet. But they will hold out in great labours surprisingly; they bear vicissitudes of cold, heat,

heat, and continued wet, that would kill an Englishman or a German, and do a great deal of work, with little sleep. Their climate, their hard manner of life, together with early habitude, may contribute much to this, but especially their hot-baths, in which practice they run out of the extremes of heat, stark naked, into the open air, in summer plunging into a river, and in winter rolling themselves in the snow. Rheums, defluxions, colds, tooth-achs, ear-achs, &c. are but rarely heard of among them. With good-living their bodies soon get a sort of plumpness; but a truly fat man would be a strange sight indeed. Their stature is rather under than over the common size, and many of the women are unusually short. A tall fellow is sometimes to be met with.

Some authors deny them to possess either virtue or conscience, chiefly because they have no word in their language to denote them. But this is a manifest exaggeration. It is true the Esthonian, as well as the Lette, terms conscience, by a periphrasis, the testimony of the heart; and virtue he expresses by good actions: but, for love, pity, patience, placability, gentleness, forbearance, and the like, they have their own proper terms. As in all other countries, there are very honest worthy people, among some that are otherwise: but even the predominant passions seem here to require a certain sort of indulgence, when we take servitude, ill-usage, oppression, and a want of education into the account.

account. The following statement, however, is, unhappily, but too true.

Both Esthonians and Lettonians, though not without numerous exceptions, are apt to indulge in inflammatory liquors. Without beer and brandy no pleasure. Intemperance is a prevailing vice, whatever indigence and misery it may cost them. Old and young, husband and wife, are seen carousing in their families, and drunk in the krougs; only girls and some young women are exempt from this charge: the aged drink hard, and continually smoke tobacco. Neither remonstrances nor woful experience can moderate this propensity; they only sleep away the fumes of liquor in order to intoxicate themselves afresh; even sucklings must taste of the glass as often as the mother drinks.

A considerable part of their pleasure consists in singing and music. The former seems peculiar to the females; at weddings they have even professed singers brought for the purpose; yet the men join in the tune as soon as the bottle has excited them to merriment. At their work in the field, at their play, the girls are always singing. Some have good voices and great natural talents; but the Esthonians more than the Lettonians. The former sing only in one key, but commonly in two parts; so that every line sung by one band is repeated by the other. They have a great variety of ballads and tunes. In several of their nuptial songs they annex to every line the two words, Kassikè, Kanikè; which

which perhaps at present are void of meaning, though formerly they may have been expressions of tenderness. The Lettonians lengthen out the last syllable to a great extent, and sing commonly in duets, one of them grunting out a sort of bass. The most usual and probably a very antient musical instrument with both nations is the bagpipes, which they themselves make, and sound in proper time, in two keys, with great dexterity. M. Arndt has endeavoured to explain the esthonian name of this instrument, torropil, though perhaps with not very great success. Every kroug, where guests are invited by the sound of this charming instrument, is sure to be much frequented, especially on holidays. The miserable horizontal harp, and the fiddle, which the Lettes are extremely fond of at all their festivals, were first introduced among them by the Germans.

In their dances the couples consist of old and young, frequently man with man, and woman with woman; one couple following quite close at the heels of the other, so as to allow of but few variations. The Esthonians keep always a $\frac{3}{4}$ or a $\frac{3}{8}$ time, make short sliding steps, and at the third stamp rather harder on the ground. The lettonian dance is somewhat different, and more like an artless Polonoise; they have also a species of country-dances.

As the Russians, so the Esthonians and Lettonians, especially the younger sort, place the swing among their favourite summer-pastimes. At almost
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every village, and at every kroug, stands this machine, on which one or two couple divert themselves at a time ; which diversion is in high vogue at Easter.

The exercise of swimming, so much recommended by Rousseau, is here the general amusement in hot weather ; all ages and sexes take to the water like so many amphibious animals : but it costs many of them their lives, chiefly by going in when drunk.

All the boors, without exception, are passionately fond of scalding-hot baths, where they once at least in every week cleanse their bodies ; a practice in many respects of great service to them, from their hard and dirty manner of living. In the midst of the most profuse perspiration, with the sweat streaming down their limbs, they go out and sit to cool themselves in the most intense cold, rubbing their bodies with snow, without feeling any bad consequences from it. While in the act of bathing, they ejaculate all sorts of pious wishes, such as, God cleanse me from all my sins, as I am now cleansing my sinful body, &c. then thank one another for the good washing, for the heating of the bath, and for the fetching of the water.

Infidelity towards their masters, distrust, a disposition to cheat and to steal, frequent elopements, and the like, are their ordinary vices, and certainly take their rise from the slavery in which they are held. They rarely rob one another ; if any one is known to do so, he is held in abhorrence by his brethren ;
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but so much the more ingenious are they in devising means to impose upon their masters; and in general all Germans. The bolts, hasps, latches, rings, hinges, and matters of this nature, are all stole from the yards and outhouses of the manor-house; let them be renewed as often as they may, ten overseers would not be able to prevent it. The casks of brandy which they convey to town, they have the art of tapping cunningly under the hoops, without touching the seal with which they are thought to be secured, and of introducing water to make good the deficiency. But, as they always carry a sealed sample of the strength of the brandy, they would presently be betrayed, if they did not know how to evaporate a part of the vinous spirit by the dexterous application of heat and cold. They make the corn-sacks pay toll in like manner, and then throw water upon them, or contrive to make a hole in the bottoms or sides so as to have all the appearance of being fretted in the carriage. They seldom sell their hops, but the buyer finds to his cost that they have been adulterated by a mixture of bad wild hops, sand, &c.

They have frequently risen in rebellion against their masters. In the year 1345 they rose in Harrien, and in 1560 in the Viek; the same thing has happened in later times. Some years ago great numbers of them assembled, with the most blood-thirsty intentions, under a leader, who taught them from the scriptures that all slavery was abolished
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by the law of the gospel ; and, seduced by false rumours, artfully spread among them, a number of Lettonians were very lately incited to commit great outrages. Some have been even known to wish for hostile invasions of their country, in order that they might mingle with the enemy and satisfy their vengeance. At times a lord or a steward is cruelly murdered. Examples are not wanting of their having carried complaints against their masters, even to the supreme tribunals ; and of their having brought them to legal punishment. Yet the generality of them are devoted with the sincerest esteem and affection to their kind and humane masters, and are enemies to all resistance. In their revenge, even among themselves, they know no bounds ; committing a murder with the greatest coolness and indifference, which they otherwise hold to be the most heinous of crimes.

Lying, cursing, and swearing are very current among them, endeavouring to make the most manifest falsehood pass for truth, by such dreadful imprecations, as, Let me perish ! May I be struck blind ! May God shower his judgments on my fields and cattle ! which are as common a phraseology with them as with the Greeks ; and in similar terms they express their aversion towards others. At the same time they appear to have a great reverence for judicial oaths ; relating numerous instances of the visible judgments that follow perjury. How much ought their superiors to encourage and cherish these sentiments for enforcing a strict adherence to truth !

Whenever a lord attempts to persuade or to bribe his boors to give a false oath, nothing is afterwards sacred to them ; even his person as well as his property are thenceforward in danger.

It will be necessary now to say somewhat of their religion. Even in Livonia it has undergone some alterations. The antient inhabitants of these countries were heathens ; several superstitious customs, not yet entirely eradicated, and some monuments still remaining are relicts of their antient worship. Of their superstitions but little need be said ; the subject would neither improve nor entertain us. One instance may suffice. Even the better educated boor cannot, without much pains and inward conflicts, suffer any spinning to be done in his house on Thursdays for fear lest the sheep should not thrive, or should die of the rot : though, on being told that, when they have been obliged to spin on that day at the lordship, no harm has happened there to the sheep, they are ready enough to acknowledge that it is an idle notion. Some pretend that this foolish observance of Thursday took its rise from the nonsense of one of their brethren, who, in the year 1563 taught them to hallow that day, because God, on account of some assistance he had received on a Thursday, enjoined it to be observed instead of Sunday. The truth of the story must be admitted on the testimony of the historian Kelch : but it gives no sufficient reason for the particular abhorrence of spinning, as they do every other kind of work on
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that day. The custom seems rather to have been kept up as a relict of paganism, and the more so, as the above-mentioned uncommissioned preacher found no very general acceptance with his brethren. Neither is the story any proof of the peculiar stupidity of this people. More enlightened nations have adopted as articles of faith doctrines to the full as incomprehensible.

Kelch and others mention some of their deities by name; but we should cautiously examine their accounts before we give credit to them. The first converters of the Livonians were but little acquainted with the language of the people. They thought themselves justified in describing their pagan worship from its most odious side, and even with pious exaggerations; in order to give a pretext to the force that was used in these conversions, and to exalt their own merits, they hesitated at nothing. They charged the unconverted with all kinds of abominations, and particularly with polytheism: however, it has never been thoroughly proved. The Yummal of the Esthonians, under which name they still, in common with the Finns, the Laplanders, &c. worship the true God, might be known by more than one appellation, as we may well believe if we but bring our reflections a little homeward; or what is related of their other deities, as Thor, &c. was perhaps no more than various kinds of homage they thought due to inferior deities, or to the memory of heroes that had arisen among them. The livonian paganism
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is affirmed to be perfectly similar with that of the Celts and the antient Germans. Of these it is well known that they had no temples, but even destroyed them wherever they were found, because they esteemed the great ruling spirit of heaven and earth, whom they held to be one only God though they adored him under various names, too great and too exalted to dwell within walls, and to be inclosed in human structures. Their religious rites they performed in the open fields, on the top of a mountain, by the side of a spring, or under the shade of a tree: such places were sacred. They believed in inferior deities, to whose government and care certain regions were allotted; they scrupulously avoided to offend, especially in the sacred places, these subordinate divinities, whom they imagined to delight chiefly in fire and water, as two beneficent elements, and therefore they threw into them bread, wax, and other offerings, as tokens of their veneration. In their groves they nourished a sacred fire. To speak of the marriage and the birth of gods, they held to be indecent, and consequently were unacquainted with female deities. They had a god, Thor, to whose influence they attributed all ærial phænomena. Statues they had properly none; nevertheless some are found among them which they probably borrowed from foreigners and their religion. — Of facts so notorious from the histories both of the Celts and the Germans, no man will expect particular proofs. Let us then return

to the Lieflanders, amongst whom we find all these religious observances, even to the minutest article; and the same celtic and german god Thor adored as a patron in military exploits. It may reasonably be affirmed, that the Lieflanders, as in the whole of their religion, so chiefly in its first principle, the unity of God (which they held from mere tradition, without any more immediate revelation, though M. Jerusalem, Dr. Leland, and others absolutely deny it to be held by any heathen nation) had a perfect resemblance with the Celts and Germans: that all their supposed plurality of Gods were but several names for the only Potentate, or were subordinate deities invested with amiable or formidable qualities, and held up to the admiration or the terror of mankind, or in order to preserve the remembrance of eminently beneficent persons; hence perhaps we may derive the origin of the tales invented by a holy zeal concerning their female deities. Among the Esthonians we can find no intimations built on sure grounds of the latter sort, and in general but few names of deities. With the Lettes they are more numerous, but that they denoted so many really distinct superior beings, it would be no easy task to prove. What I have been able to collect with any certainty concerning their nature, offices, rites, and representatious, I shall here subjoin.

Mahjaskungs and Zeemniks seem to have been a kind of penates or household gods; the latter particularly presided over vassals and cattle, for which

reason they sacrificed in both kinds to him in autumn. Lulkis, likewise a kind of spiritus familiaris. Meehra Deeus, or Mesha Deeus, the god of wild beasts, particularly wolves. Pushkeis, the god of forests. Pilnihts, the god of plenty. Aufkuhts, the god of health and sickness, chiefly worshipped by the Lithuanians. Veitzgants*, the patron of betrothed persons, particularly the bride. Gahrdehdis, the fisherman's god. They also reckon up a few goddesses: Deevékla, generally called, by way of eminence, the goddess, contractedly Dehkla; who, it seems, was the tutelary deity of women in childbirth, by whose benign influences the new-born babes were lulled asleep and made to thrive. Others ascribe these effects to a Tikkla or Tiklis, while to Dehkla †, they consigned the care of the children at the breast. Laima was the goddess that presided over pregnant women; and Mahte was in general the childrens' goddess, known under several epithets; among others Peena Mahte, for whom they kept the domestic snakes, which they carefully fed with milk; and even to this day, in some houses, especially among the vulgar, the superstition is still retained of dreading to drive the house-snakes out of doors.

Of the places and groves where the antient Lieflanders, as well Esthonians as Lettonians, were wont to perform the holy rites of paganism, many,

* From van veitzaks, it succeeds well.

† From the lettish word deht, to suck.

notwithstanding the strict orders that have been issued for their demolition, are still in being, towards which they constantly testify an awful reverence. None choose to approach them, nor ever venture to cut a bough from a sacred tree, or even to pluck a strawberry that grows beneath its shade. If a German, out of wantonness or zeal, does an injury to these trees by cutting or breaking them, they shudder with the certain expectation of some impending judgment. Some of these sacred places are distinguishable by one, others by several (mostly oak) trees; on hills, in plains, or near a spring. Boors that are not deterred by the fear of discovery, and the penalties annexed to it, wish to be privately buried in these places; some of which perhaps originally owed their consequence, not merely to religious rites performed there, but to the event of some league or treaty concluded at them; and afterwards, by an easy transition among unlettered people, were considered as sacred and inviolable. Rousseau has somewhere judiciously observed from antient history, that it was customary not only to take the gods to witness the covenant, but to make choice of certain stones, hills, and trees as memorials of the transaction. Instances of this custom are to be met with in the books of Moses and the chronicles of the Jews. The sentiment that the inferior deity, who delights to dwell in this spot, will revenge the violation of a monument marked out for calling to the minds of men the engagements they

they have mutually entered into in the presence of their god, is of wonderful efficacy with rude and uncivilized people. Superstitiously to visit and revere all such hallowed groves is strictly forbidden: but faith suffers no restraint; and inveterate prejudice triumphs over reason. Several barons have commanded their boors to go and cut down such trees; but neither threats nor persuasions would prevail till they inspired the awe-struck vassals with courage, by taking the axe into their own hands.

Offerings of wool, wax, yarn, bread, &c. are still in use among them, by laying them on the holy places, or cramming them in the hollows of the aged trees. Springs and rivers likewise have their share of these unbloody sacrifices. But, especially when any sudden eruption or ulcer appears on their body, they say, it comes from such a place, or properly from the earth; they therefore go to the place where they have last sat down, or slept, or drank, and according to their opinion, got the harm: there they scrape some particles of silver from a ruble, or from the neck or breast ornaments of their wives; and then, as nature commonly soon relieves herself, they take him to be a very silly man who should doubt of the efficacy of the silver-scrapings. This may be considered as a propitiatory offering to the deity of the place. At their secret idolatrous assemblies, the keeping up of the fire, into which they throw all sorts of offerings, is still a principal observance.

If it be true that the Celts paid no regard to statues and idols as necessary appurtenances of their worship, yet they were not altogether unacquainted with them; whether they borrowed them from other nations, or adopted them in some places as the inventions of ingenious persons. In Liefland too they had idols, though perhaps in no great number. Kelch describes one that they worshipped under the figure of a crowned man; which must have been of a pretty large size, as they used to deposit their offerings in a bowl fixed on his lap. In the library belonging to the Olai church at Reval, among other curiosities, is still preserved a liefland idol of the heathenish times, and is about four inches in height. As there were then no eminent artists in Liefland, the form given to this figure but poorly expresses that of a man: perhaps they were made merely in memory of their heroes.

We likewise find some few altars still remaining; probably a sort of table for offerings: however I shall not presume to state their peculiar destination. One is yet standing in the Oberpalschen, near the lordship of Kavershof, under the branches of a sacred tree, in the hollow of which little offerings are still frequently found. This altar, artlessly hewn out of a large block of granite, is about two ells in height, somewhat of the same in length, but scarcely one ell broad; smooth at top, of nearly an oval form, surrounded by a frame rising two inches above the foot. The foot, all of one piece
with

with the flat of the table, is pointed downwards that it may stick fast in the earth : that it is a reliet of paganism, is confirmed both by common report and the evidence arising from the thing itself. After the reformation no field-altars were erected ; in the times of popery they would have had a better shape, and would certainly not have been placed under a suspected tree ; in general the whole form of it contradicts the supposition that it was made after the introduction of christianity. For domestic uses it could not have been designed, as many boors even at this day have no table at all in their houses, much less one of stone. — That their sacred trees and groves renew themselves by the casual falling of their own seeds, or by secret plantation, scarcely needs be mentioned.

Proper idol-temples indeed have not been found in Liefland ; yet, in regard to an antient wall still standing I have some doubts. It stands near the Vastemois, but in the precincts of Fellin-castle, on a little elevation in a forest much grubbed up. The wall is quadrangular, two ells thick, four fathoms long, and three fathoms broad. On each side are seen three small windows ; but none above the gate opposite. It is not exactly known whether they were formerly covered ; nevertheless the boors unanimously relate, that in antient times, when the Fellin road ran that way, a traveller chanced to lose himself in this forest, then very thick with trees, and in the anxiety of his mind here vowed to build a

chapel, which he did accordingly, and bestowed upon it the name of Risti Kirrik, that is, the Cross-church. — If we give faith to this story, the builder must have been a christian. — At present this dilapidated structure is put to a very singular use. Every year, nine days before the feast of St. George, or, as they call him, St. Yurgen, in the night, great multitudes of boors, of both sexes, and of all ages, from all the adjacent parts, assemble here, sometimes to the amount of several thousands, kindle a fire within the inclosure of the wall, into which they throw offerings of various kinds, such as yarn, flax, wool, bread, money, &c.; at the same time depositing all manner of waxen figures in the little apertures that seem to have served for windows. Round the fire sits a circle of beggars, who have the care of keeping it up; and for their trouble partake in the offerings. Of all the sights in the world, this is surely the most ludicrous. All the barren women of the country round, dancing stark naked about these old walls; others eating and drinking with noisy festivity; many more running in frisky gambols about the wood, and followed by young men, playing all sorts of tricks, and talking all manner of ribaldry. Hitherto it has not been possible to put down this strange licentious meeting; in the mean time all the circumstances of it seem to shew that it is derived from the days of paganism. The offerings, the fire, the dancing, the licentiousness, are manifest proofs of it: but then have we the

the remains of a heathen temple in Liefland? Without pretending to decide this question, I find it not probable, that a people, known to be remarkably tenacious of their old institutions should in modern times make choice of a place to meet in for their interdicted worship, which their fathers had not employed to a like purpose. What should move them to it; since they would be better concealed, and be less liable to detection, in the far deeper forests at no great distance. The preservation of the wall, through so many ages to the present times, may be owing to reparations carried on by stealth; the story about the occasion of building it, and the reason for its name may be all a fiction, in order to save the place from the destruction with which it was threatened by the christians. The Celts and Germans had no temples; neither had the antient Prussians any: but simply from a quadrangular wall, we can draw no inference of a temple. We are told by a learned antiquarian*, that the Prussians had the sacred forests, where they worshipped their deities with fire and sacrifices, surrounded with curtains or screens. The Lieflanders may likewise have had screens or fences for a similiar purpose; Kelch speaks of hedges, which they set up in the forest around their idol. This was necessary at least for keeping off the cattle that roamed at large. For the sake of solidity and permanency they may easily

* Dr. Arnold, in his compendium of the ecclesiastical history of Prussia, book i.

be supposed to have changed the hedge for a wall, as is often done by the rude inhabitants of other countries as well as of Liefland; but long before the arrival of the Germans, here was a sort of towns and permanent houses, and in all probability even ruffian churches; and if that were not the case, yet this we know, that the Danes built monasteries in the eleventh century on the coasts of Eithland. — Accordingly, we find inclosures, even walls, serving them instead of temples, without bearing that name, because it is likely they were uncovered at top. This is delivered merely as an hypothesis, which others, more deeply versed in antiquities may think worth examining. To conclude, if the wall was actually built for a christian chapel, yet the Esthes found it not unsuitable for the performance of their heathenish devotions. Mr. Becker, in his little tract under the title of *Livonia in sacris suis considerata*, positively says: *interea in lucis five fylvis istis neque templa, neque aræ, nec columnæ, nec idola fuerunt inventa*; which is certainly advancing much more than he has authority for.

Not from the first pages of antient history, which are for ever veiled in obscurity, nor yet from unwarrantable surmises; but, judging by antient usages still remaining, we perceive a great resemblance between the old religious rites of the Celts and the Lieflanders, why should it not be thought highly probable that the Liefs and Esthes by their Yummal, and the Lettes by their Deeus, designed the sole true God;

God; in subordination to whom they only admitted inferior deities as beneficent or malicious spirits? Perhaps it might be for this reason that the doctrine of the devil met with such good reception, and is still preserved with so much reverence among them, insomuch that they generally tremble at the mere recital of his mischievous doings; imputing to him all the evil that happens in the world. Doubtless it is because they think him like the dreadful deities they formerly imagined.

Among the Lettes and Esthes also many remains of heathenism are still observable; so that it should seem as if the reformation together with all the learned opinions so scrupulously maintained by the bishops, have not as yet been able to eradicate them. Their ignorance, then, which we must therefore believe partly invincible, with its attendant an unusual sensuality, cherish their propensity to purchase by sacrifices and offerings a happy progress in their undertakings. In general, the benign influence of religion on their conduct is not perceptible by the most attentive observer.

In the twelfth century the Liefs and afterwards the Lettes, were brought to the profession of christianity by the Germans; but a part of the Esthes by the Danes. Perhaps they already knew it by name, through the Russians who dwelt in the country. The Germans gradually introduced baptism over the whole of the islands as well as the firm land. The new religion got an outward splendor from the
teutonic

teutonic order, the institution of bishops, the foundation of monasteries, and the appointment of priests; all was purely catholic. Nevertheless the Russians have at all times had churches in Liefland; therefore in the various treaties entered into with the sovereigns of Russia, it is always an article that the russian churches shall be kept clean and in good repair, and in all respects according to antient usage.

A few particulars relating to the conversions in Livonia, from the old chronicle of Henry the Lette, may be worth inserting here. It plainly appears that most of the conversions from heathenism in the fourth and fifth centuries were undertaken by fanaticism and the lust of dominion; that they were carried on under a total ignorance of the human heart, by means of imposture, pious frauds, artifice and violence, supported in their course by superstition, intolerance and self-interest, and finally terminated in a tyrannical subjugation of the understanding and will, and in the usurpation of the rights and property of the individual. Preserving this resemblance on the whole, the several nations and ages in which they were transacted have had their variations. Sometimes the arts of persuasion were more employed, sometimes those of imposture succeeded better, and sometimes tortures and murders were found most beneficial. The history of Livonia unites all these methods in one striking picture. Scarcely any means were left unemployed. A diversity which will be very comprehensible when we see

see what a difference there was in the converters in regard to rank, talents, authority, views, and abilities; and at the same time take into contemplation the qualities of the heathens who were to be converted.

The first dawn of christianity in Livonia promised a lighter, warmer, and more productive day than that which actually ensued. About twenty years had elapsed since the merchants of lower Saxony had discovered the mouth of the Dvina, and employed it in the purposes of commerce, when their factory became so numerous as to require a religious teacher. This teacher was Meinhard, an old monk of the monastery of Segeberg in Holstein. The time of his arrival in the country is not ascertained. Some pretend that it was in 1170, others in 1186. Probably his coming was chiefly on account of the heathens; but, not prematurely to betray his design, he confined himself at first to his little german congregation. During this time he was learning the language of the country; and, thinking himself sufficiently strong in it, he requested permission of the russian prince Vladimir at Pscove, to preach christianity there. Thus the worthy old man connected caution with his zeal, two properties not always found together; pity that his perceptions in religion were only the perceptions of the age in which he lived: extremely weak, undigested, and confined. It is therefore to be lamented, but not to be wondered at, that, as was customary at that time,

time, he baptized without instructing. A weak ill-founded edifice cannot possibly stand long. Nevertheless, Meinhard's labours were attended with success. A service which he rendered to his new countrymen in a civil capacity contributed not a little to it: he repulsed the Lithuanians who had made an incursion upon them. Profiting by this event, he laid before them the necessity of having a strong fortress; they were convinced by his arguments: and he promised it them on condition that they would allow themselves to be baptized. Meinhard caused builders and materials to be brought from Gothland; and for defraying the expence obtained an estate in land. The fortress Ykeskola, now called Uexkull, was finished; but when the natives had got what they wished, they would hear nothing farther of christianity. The greater part had promised to submit to baptism when the building should be completed; they flew from their word: many had been previously baptized, and even the majority of these relapsed. Their neighbours also in the present Kirchholm cheated the good priest. They too promised to become christians, if he would but build them a castle: and they likewise forfeited their word. The people of Kirchholm proceeded still farther: they plundered Meinhard of what he had, and maltreated his people. That he was in the mean time appointed bishop was not a sufficient consolation to him. He therefore determined to return with his clergy to Germany.

Germany. The Livonians more than once detained him from putting his design in execution; one while by entreaties, at another by menaces and actual violence, and yet they did all that lay in their power to render his stay uncomfortable. Deceived in his fairest hopes, exposed to a variety of insults, and surrounded by still greater perils, Meinhard passed a few uneasy years longer among them, and died more of grief than of age. A man worthy of a better fate.

Whether accident or artifice on one hand, and pious credulity on the other, had the greater share in producing them, it is not now to be ascertained, but the Livonians also have MIRACLES to shew in the history of their conversion. The monk Diederik of Thoreyda was one of Meinhard's most active assistants. He baptized beyond the Aa. From envy at the fertility of his fields, the Esthonians wanted to sacrifice him. In order that they might learn the will of their deities on the subject, they began their usual experiment with a sacred horse, by remarking which foot he set foremost on beginning to walk; on this occasion he moved the left foot first, it was therefore the will of the gods that Diederik should not be sacrificed. But the Esthonian priests were of opinion that the god of the christians had seated himself on the back of the horse, and forced him to set that foot foremost. The horse must therefore be rubbed down in order to brush off the deity to the ground; and the solemnity

nity was renewed. Again the left foot ! Diederik was now absolved.—A Livonian who had a wound besought the monk to heal him, on condition of being baptized. Without knowing any thing of the art of medicine, the converter mingled some herbs together, to which he hoped to impart a healing efficacy by his prayers ; the patient in fact recovered, and became a christian.—Another at the point of death, thought by baptism alone to be restored to health. His family and friends conceived that price too high, and nothing but the most manifest peril of death at last made their obstinacy yield. However, the profelyte died. So much the worse ! we are ready to exclaim. But no : so much the better ! Another new convert, who was forty-two miles from the place, saw the soul of the deceased borne by angels to heaven : a circumstance which had a better effect upon them who believed it than the recovery of a patient.

It was this Diederik whom bishop Meinhard sent to Germany to preserve the remainder of christianity by all possible means against the heathen, were it even by force of arms. Their ill-treatment of the pious bishop had compelled him to this measure. Thus, by insincerity, artifice, and thirst of blood, they drew the sword from the scabbard which afterwards chastised them in so dreadful a manner.

In Meinhard's place, Berthold, abbot of the monastery of Lockum in Hanover, was elected bishop. He had Meinhard's caution without his zeal ;

zeal; it was, therefore, no wonder, that in the present state of things he hesitated to go into Livonia. But the archbishop of Bremen, to whom the new congregation had applied, persuaded him to take the journey. Accordingly, he arrived in the year 1197, and strove to recommend himself to the natives by qualities which they valued most. He gave them frequent entertainments, and on all such occasions sent them home with presents. He therefore met with a civil reception. Their civilities, however, lasted not long, and affronts were very soon followed by outrages. He was reproached with having come merely on account of his poverty. Perhaps he might be too precipitate in demanding the interest on this out-lying capital of the entertainments. However this be, matters proceeded so far, that at the consecration of the church-yard of Kirchholm, the Livonians threatened to stab, or drown, or burn him. Perhaps it was owing solely to this indecision on the mode of his death that he happily escaped. He found it however not advisable to remain here any longer. He left Livonia; and we should have pitied him if he had been obliged to this step for the sake of being at rest; but it proceeded from malice. He applied to Gothland and to Lower Saxony for succour. The pope afforded him the most effectual by causing a crusade to be preached against the heathens in Livonia. In consequence whereof a great number of sinners, desirous of meriting indulgences by murders,

murders, flocked to his standard, and Berthold, in 1198, returned to Livonia with soldiers. According to the unhappy notions that prevailed at that time, the field of religion, which can only be fertilized by cordial zeal and diligence in instruction, was to be fattened with blood. From such methods what else but thorns and thistles can spring up? The sight of an armed host did not produce among the heathens and heretics what was probably expected. Prepared to fight, they went to meet the invaders. They sent deputies to the bishop with the question, why he was come with soldiers? Berthold answered, to punish them for their shameful lapse from the christianity which they had adopted. The natives replied, let him send away his warriors, and exercise his office in peace; those who have suffered themselves to be baptized, may by his remonstrances be preserved in christianity; the rest he may convert by words, not by blows. A reply which ought to have put the christians to shame; but it cannot be mentioned to the honour of the Livonians. This was only a new essay of their artful insincerity, in their eagerness to get the soldiers away, as appeared in the sequel. A truce was concluded, but the heathens soon broke it by the assassination of several Germans. Berthold declared war, and a bloody battle ensued. The first who had attempted to make christians in Livonia by the sword, was the first who fell by the sword; the bishop on horseback rushed into the throng, was stabbed,

stabbed, and cut to pieces. The enemy, however, had been previously thrown into disorder, and were now more furiously pursued by the enraged soldiers. And thus the very loss of the chief contributed to the great increase of the congregation. The heathens being entirely routed, and even their corn-fields laid waste by the christians, now sued for peace, admitted priests into the forts, promised them from each haak * a measure of wheat, and flocked in such numbers to be baptized, that in two days in Uexkull and Kirchholm one hundred and fifty christians — were *named*. This done, the German soldiers to a man were embarked on board the merchant ships, and returned home. Scarcely were the ships at sea, but the Livonians ran and bathed in the Dvina; in order, as they said, to wash away the baptism and christianity together, and send it back to Saxony. They found a human head cut out in a tree. In the opinion that this was the god of the Saxons, who might probably still do them

* Haaks, hakes, or hacks, (for it is written these several ways,) is the land-measure for ascertaining the dimensions of an estate and its taxes to the crown. An estate of two haaks may be more productive than another of five. In Esthonia the labouring people upon the estate, but in Livonia the cultivated ground and its product, determine the number of haaks. Grounds that were formerly tilled and used, as such were enregistered at the revision, but for want of people now lie unlaboured, are called waste haaks, from which no taxes are demanded. In regard to such it is said, the estates can never increase its number of haaks.

much mischief, they hewed it in pieces, made a particular kind of float of the fragments, and set it swimming on the sea towards Gothland. They also robbed and plundered all that remained behind, and put upwards of two hundred to death. It is easy to imagine that the clergy, of whom several had come hither at various times, must be thrown into great distress; but the dangers of their situation were increased when the Livonians expressly resolved, that all priests who should be found in the country after Easter 1199, should be slain. A similar fate awaited the merchants. These ransomed their lives with money; but the clergy were forced to fly to Lower Saxony. Christianity in Livonia now seemed to be verging to its total overthrow, and just at this point of time appeared the man who established it on a firm foundation; indeed on swords, fortifications, and chains of bondage—he, however, established it. There came the armed apostle Albrecht of Apelderen, afterwards canon of Bremen, now bishop of Livonia: and it must be confessed that the livonian heathens deserved such a one much more than many other nations who were harassed into christians.

The monk Meinhard, and the abbot Berthold, were principally bent upon baptism. Albrecht the nobleman and the canon was more resolved upon governing than converting the Livonians. As soon as he was elected bishop, he made it his business to procure effectual support in Gothland, Denmark,
and

and Germany, and obtained it so richly, that in autumn 1199, he arrived in Livonia with three and twenty ships. At first he was not successful; but now the burning of the corn-fields had again its effect: that is, the Livonians became christians for fear of starving. They confirmed their fidelity by hostages, which were obtained by inviting the chieftians to a feast, and then seizing and conveying them to prison. The pope had hitherto been very active in the propagation of christianity in Livonia, by a general summons to make war upon the heathen; he now made a merit of adding good counsel. He issued a bull, in which he recommended the converters to use gentleness and lenity towards the baptized, even at the expence of the true discipline of the church. And indeed the conduct of the clergy in Livonia at that time redounds infinitely more to their honour than elsewhere. It was, properly speaking, the temporal arm that riveted the fetters of slavery on the natives, and, in the sequel, made even the clergy feel the weight of its iron hand. True, it was the clergy themselves that armed it, when the bishop, in the year 1201 or 1202, founded the order of the brethren of the sword*, and procured its confirmation by the pope. Their destination was to support the bishop in converting the infidels; their constitution was afterwards united with that of the

* Fratres Enfiferi.

knights-templars. For the times, principles, and exigencies of Albrecht, the institution of such an order was no bad conceit. Indeed he made an annual journey to Germany to fetch pilgrims; but when these had been robbing and plundering for a year to the glory of God, they were absolved from their vow, and went back to Germany. Whereas Albrecht employed valiant men from whom the bishopric might expect continual protection. For which reason he gave ample fiefs to some courageous nobles. But having not many of these at his disposal, he fell upon the thought of forming about him a sort of standing army; and this purpose he effected by the new order. He also devised other methods for farther confirming christianity in the country, in temporals as well as in spirituals. In the year 1201 the bishop built the city of Riga, the consequences whereof the heathen plainly saw, but they endeavoured in vain to prevent it. Hitherto the cathedral chapter was at Uexkull; Albrecht now transferred it to his new city, where he also built a monastery. Another monastery was also constructed at the mouth of the Dvina. The clergy dispersed themselves in all the country round, in order to teach and to baptize.

Of the methods employed in teaching, history mentions only one. It is curious enough, but certainly not the worst of those times. The dramatical annals of any nation can scarcely shew a theatrical college of such remote antiquity as that of Riga.

At

At Riga in 1204 was acted a prophetic play, that is, a dramatized extract from the history of the old and new testaments. The design was by this means to allure the heathen to the adoption of christianity, partly by attaching the converts to their new religion by sensible gratification, and partly to instruct them in the history of it. The Livonians, baptized and unbaptized, resorted to it in multitudes, and they were informed of the contents by an interpreter. The piece was probably in latin; in pretty much the same taste as the biblical plays that were customary in England, France, and Germany, in the sixteenth and even the seventeenth century. The number of the performers must have been very great, (perhaps it consisted of the whole order together with the chapter,) as battles and wars were represented, for instance, from the history of Gideon, David, and Herod. The first exhibition, however, was like to have been attended by very serious consequences. When the Israelites under Gideon's command were fighting at close quarters with the Midianites, the heathens took it into their heads that the armed troops were brought in under this pretence, in order to fall upon them. They, therefore, sought their safety in flight. Their mistake, however, being explained to them, they were persuaded to return, and the play was brought to a happy conclusion.

It is not the historian's fault if the several groups of this picture stand rather wide asunder. The

last scene was a biblical comedy. Now follow martyrs.

Our annalist * is as lavish of this venerable name as the fathers of the church, and therefore is not always careful to bestow it according to merit. A couple of inconsiderate profelytes ventured, notwithstanding the remonstrances of the german commanders, to go into the meeting of their heathenish brethren in order to hear their consultations; they were seized, and methods were adopted to force them to abjure christianity: they remained firm, and the consequence was that they were killed. The annalist calls them martyrs. If, in the incessant conflicts with the neighbouring heathens, some of the baptized were taken prisoners, and, for the cruelties they had used, were cruelly put to death, they are styled martyrs. If pilgrims, who came to Livonia for the purposes of robbery and murder, met their deaths in a combat with the heathens, they are denominated martyrs. There were, however, really some who deserved that appellation. Some priests who lived among the new-converts were clandestinely attacked and murdered without accusation. But with people who themselves are hardened to the highest degree against all sorts of torture, the sight of intrepid sufferers made no great impression. The business of conversion, therefore, in Livonia was not so much benefited by

* Henry the Lette, Livonian Chronicle, published by Arndt, part i.

martyrs as it was in luxurious Asia and Italy under the heathen emperors.

In the year 1205 Andrew archbishop of Lunden, on his return from an unsuccessful crusade to the isle of C  sel, came to Riga, where he passed the winter. Henry the Lette relates many good deeds which he performed; we may reasonably believe that also many of the events that afterwards happened, without being ascribed to his merit, were of his doing. Andrew by having prosecuted his studies in Italy, France, and England, was a very learned divine, and now made in Riga an excellent use of the knowledge he had acquired. He gave lectures in theology to the clergy of that city, expounded the psalter, and exercised them in ascetic practices. By his advice the vicar of the bishop of Riga, in return for hostages received, sent priests among the Livonians, divided the country into distinct parishes, and caused them to be not merely baptized, but previously instructed. To secure his institutions churches were built. Among the popular teachers a certain Alobrand particularly distinguished himself by zeal, activity, and prudence. The confidence placed in him by his congregation was so great that they appointed him their judge even in temporal matters. If the connection of the civil authority with the priesthood be in general an impediment to the progress of mental improvement it is certainly beneficial among a rude people. Had all priests been like Alobrand they would not so soon

soon have forced the laity to take the seat of judgment. But by the oppressions of rapacious adventurers this practice very quickly degenerated into an obstacle to conversions.

Notwithstanding this better regulation, contrary means and accidental circumstances made more christians than instruction. The Germans fitted out an expedition against Selburg beyond the Dvina. The fortress was surrounded, the besieged were harassed on all sides by the attacks of the enemy; at length the christians set fire to the town. On this the Selens from desperation capitulated with the christians. One of the missionaries came to the Lettgallians in the district of the present Valk. The historian honestly relates that they had adopted christianity, because they reckoned on the protection of the Germans against the oppressions of their neighbours. But at the same time the russian converter had appeared in the district. Doubtful to which religious sect they should give their assent, the former pitched upon a method which was still more ambiguous than their motive. The lot was to decide. It fell in favour of the Germans; and thus the congregation of Riga acquired a new accession of converts. In another instance the matter stopped short at the intention; but, as a supplement to the history of rude uncultivated man, it ought not to be passed over. The Esthonians had laid siege to a town which was defended by converted Lettes. While the enemy were carrying on their attacks, and the garrison endeavouring to repulse

repulse them, the priest of the citadel had the courage to get up on one of the highest ramparts, and with a musical instrument to accompany a religious hymn. The heathens were struck with such surprise, at a melody so novel to their ears, that they suddenly refrained from the attack, and inquired the occasion of it. The Lettes returned for answer that it was the expression of joy at the happiness arising from baptism, and on account of the signal assistance of God in the combat, which was visible from the advantages they had actually gained. Unwilling to contend against such superior force, the Esthonians made offers of an accommodation. But, as the restitution of merchandize that had been carried off to a great amount was made an absolute condition of the treaty, the consideration of so important a surrender effaced the transient impression of the interference of heaven, and they contented themselves with raising the siege. In short the business of conversion among the Lettes went on so prosperously, that they were all baptized to the number of one thousand two hundred and nine.

Far more slow was the progress of christianity in Esthonia. Before the appearance of Meinhard a certain Fulco had received the commission to labour at the conversion of the Finns and Esthonians. He was succeeded by another likewise appointed by the Swedes; still, however, little was done. Perhaps it was because conversion was the sole concern; and

and that, with so robust and stubborn a people, could not possibly proceed so rapidly as among the more pliant Lettes. Albert adopted a different method; he resolved first to conquer Esthonia and then to make converts. He went so zealously to work, that in 1210 he ordained a bishop even before he had a diocese to give him. Christianity, however, was gaining ground, but not a foot in extent that was not manured with blood; frequently to such a degree that even the furious zealots themselves, though hardened by the practice of the times, stood aghast at the sight, and seemed to relent. Thus, in the year 1210, when the burg of Viliende (Fellin) was brought to submission by compromise, the fortress was full of dead bodies, and the remainder of the garrison disabled by wounds. The first thing the conquerors did was only to sprinkle them all with holy water, and then proceeded to instruct the heathen in the first rudiments of christianity. At other times they used first to baptize; for this once, however, they deferred it a little, because, says the annalist, too much blood had been shed. Leal was converted by fire. The outworks haing been previously burnt by the Germans, the besieged endeavoured to move the enemy to retire by an offer of money: but this they rejected, at the same time assuring them, that they wished for nothing more than that they would allow themselves to be baptized, that they might be reconciled with the great Pacificator, and become their brethren as well in the present as
in

in the future world. The Esthonians still held out; but the fire was spreading far and wide; and in order not to be burned, they requested to be baptized. Was it surprizing, that such profelytes adhered to the faith no longer than till the apostolic incendiary had quitted their borders?

It would be tiresome to pursue the subject: therefore only a few traits more, as being eminently characteristic.

Ungannia [the district of Dorpat] and Saccala [the country round Fellin] were in 1214 reduced to christianity. Rotalia [the Strandvyck] was likewise to be compelled to adopt it, and the Germans were besieging a strong castle in that district. After a brave resistance the Esthonians were forced to surrender for want of provisions and water. This they did on the usual terms of submitting to baptism. Twenty days afterwards a priest was sent to them. Concerning any previous instruction we find nothing recorded. He merely asked, Will ye renounce idolatry and believe in the only God of the christians? They answered, Yes. On which he poured water on them, saying the words: Ye are therefore baptized in the name of the father, the son, and the holy-ghost. With this the whole of the grand business ended.

Better regulations however were soon adopted in behalf of the Esthonians. The bishop of Riga in the year 1219 sent priests into many of the provinces, who at least took some pains in instructing before they administered baptism; it is nevertheless
plain

plain from the precipitancy with which these converters proceeded in their labours, that the instruction could not possibly be adequate and sufficient.

Henceforward christianity made rapid progress in Esthonia. Alas, it did! and never was it more clearly manifest with what spirit the converters were animated than at this period. Christianity furnished merely the pretext, all their industry and abilities were directed by the thirst of dominion. The Swedes made themselves masters of a part of Strandvyck, and to retain the people as subjects, made them christians. But in an attack by the *Æsellers* their whole army was cut off, and for the present they abandoned the enterprize. The Danes, who were in possession of the province of Reval, disputed the right of the people of Riga to baptize in Esthonia, pretending that they alone had the right of dominion there; the two rights being at that time the same. However this species of rivalry may be deemed unworthy of christianity, still more so were the shocking scenes which it occasioned. The Danes sent into the heathen villages, whither their baptists could not immediately come, large wooden crosses: the erection whereof was for the purpose of informing the people of Riga that these places were already in occupancy. They carried their extravagance still farther. The Riga priests came once into an esthonian village, to whom the elderman said, Here all are already baptized. Probably the priests knew that the Danes could not yet have been here, and therefore asked, How? and by whom?

whom? " Yes, answered the Esthonian, some of
" our people were in a village, where the Danish
" priest happened to be; there he baptized us,
" and gave us consecrated water to take home,
" that we might here baptize ourselves. Accor-
" dingly we have sprinkled our wives and chil-
" dren with it, and what need is there then of a
" new baptism?" Certainly, what need of a new
one? but in the circumstances which the new con-
verts exhibited, why even the first? The manner
of proceeding was in this instance only absurd; the
Danes in other places carried it to a criminal act.
They hanged an elderman of Vierland for having
caused himself to be baptized by the men of Riga,
and given them his son as a hostage. An accom-
modation, indeed, was entered into between the
Germans and the Danes, whereby the latter re-
nounced the paramount lordship over Esthonia which
had been conquered by the knights: yet tranquil-
lity was of no longer duration, than while one party
or the other felt itself too weak for beginning the
attack. When they had once found a fit opportu-
nity their reciprocal feuds were recommenced. A
papal legate who came to Riga in 1225, and gained
great reputation by his manner of treating the new
converts, took all possible pains to reconcile the
contending parties: but always without any lasting
effect. On the contrary, his presence was the in-
nocent occasion of fresh acts of baseness in the
Danes. For as soon as he was gone, they set up
an impostor as legate from the pope, who formally
put

put the knights under a bann, and employed the zeal of the new converts in behalf of the church, to incite them to exterminate their converters. These contentions lasted till towards the middle of the thirteenth century. Livonia and Esthonia were baptized; even *Æsel*, by the campaign of 1227, was brought under the yoke of the christians, and at the middle of that century there were only in Courland a few nominal heathens: in reality indeed there were infinitely more. Five bishoprics were at that time in the new-converted provinces; Riga, Dorpat, *Æsel*, Selburg, and Reval.

Considering the whole of this business of conversion, are we to be surprised at the frequent relapses of those who had been baptized? And is it any wonder that an edifice constructed on so weak a foundation should, even after so many centuries are elapsed, discover no traces of its origin? That these provinces were in the sequel almost uninterruptedly ravaged by bloody wars, domestic and foreign, that the natives in various parts still sigh under an oppression, of which it is thought a sufficient justification to say that it is not equal to the negro slavery; that many a man is made a teacher of a congregation, who scarcely understands the first elements of the language of his people:—all this, and much more, contribute greatly to the deplorable appearance, of which of late some honest and enlightened preachers of these provinces have publicly complained: but it is no less certain that it is greatly owing to the methods taken for converting our heathen at the beginning of
of

of the thirteenth century, that still at the close of the eighteenth so many remains of paganism are found among the Lettes and Esthonians *.

In the year 1522, the reformation forced its way into Liefland, by a preacher, who, on being driven out of Pomerania, had fled to Riga, named Andreas Knoepken, or Knopf. It quickly spread itself far and wide, and was even favoured by the order. All followed Luther's doctrine; and the popish ritual, afterwards patronised on the part of Poland, had, on the whole, no influence to its detriment. During the sovereignty of Sweden over these regions, a law was enacted, that whoever deviated from the doctrine contained in the symbolical books, should be incapable of inheriting any lands or dues for ever. Every other religious practice was prohibited, and even to be present at it, under the penalty of a hundred dollars in silver.

By the 10th article of the treaty of Nyftadt, the greek religion is secured in the free exercise of its rites. In Riga there is a church for the use

* Das Russische reich, oder merkwürdigkeiten aus der geschichte, geographie und naturkunde aller der länder, die jetzt zur russischen monarchie gehören, von Karl Gottlob Sonntag, oberpastor an der Jacob's kirche zu Riga, tom. i. p. 73, & sqq. p. 267, & sqq. The most credible voucher for the transactions of those times is undoubtedly Henry the Lette. Arndt's chronicle, part i. p. 1—45. Hiærne has made use of them; Kelch and Russow relate the circumstances more fully, but their sources are not always to be relied on. Gadebusch gives the result of the historical critiques on the productions of this period. Livonian year-books, part i. sect. i. p. 13—43.

of the Calvinists ; the catholics have not as yet built themselves a proper church, but perform their worship in a house fitted up for that purpose. In Liefland it may be justly said, that every man may follow his own persuasion in matters of religion without the least molestation.

In Liefland count Zinzendorf found also many friends to his church-institution. Its rapid progress, indeed, attracted the notice of government. Two of their followers, Eberhard Gutslef, superintendant of *Æfel*, and another, a preacher of that place, on account of certain charges laid against them, were brought to St. Petersburg in 1747, with two other brethren, where the first died in prison of sickness in 1749, and the other was set at liberty in 1762. Since that event nothing has ever been attempted against the members of that fraternity.

Having already extended this section beyond what the limits I proposed to myself will properly allow, I shall therefore conclude with somewhat concerning their language.

Mr. Hupel, to whose laborious researches the world is under great obligations, gives the following extract of a letter from M. Pritzbuer, provost of Marienburg: " A provost of Mecklenburg, of the name of Frank, has written an account of Mecklenburg. In the fifth century of his history I find the lettish paternoster in Mecklenburg. Making allowance for the later improvements of the language, the imperfect knowledge of it in the first promulgators of christianity, the mistakes from frequent

frequent transcribing or printing, the still usual drawling out or expanding of the words, and the changing of some vowels, as a into o, also o into oa, and ee into i, as is customary in these parts, I conceive the matter to be very clear. I will therefore subjoin it as it comes to me, together with the corresponding words as they are now in use:

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|------------------------|--------|--------|-----|------|------|
| 1. The old vendish : | Tabes | mus, | kas | tu | es |
| 2. The present words : | Tehvs | muhfu, | kas | tu | effi |
| | Father | our, | who | thou | art |

- | | | | | | |
|------------|------------|-------|------------|------|----------|
| 1. eeshan | debbes ; | fis | fvetitz | tows | varetz : |
| 2. eekshan | debbefim ; | effus | fvetitihtz | taws | vahrds ; |
| in | heaven ; | be | hallowed | thy | name ; |

- | | | | | | | | |
|----------|-------|------|------------|------|--------|------|----|
| 1. enach | mums | tows | valstibs ; | tows | proatz | bus | ka |
| 2. eenhk | mums | taws | valfliba ; | taws | prahtz | buhs | kà |
| come | to us | thy | kingdom ; | thy | will | be | as |

- | | | | | | | |
|------------|----------|----|--------|----------|-------|-----------|
| 1. eeshan | debbes | ta | wursam | femmes ; | masse | demishe |
| 2. eekshan | debbefim | tà | wirfu | femmes ; | muhfu | deenishku |
| in | heaven | fo | on | earth ; | our | daily |

- | | | | | | | |
|----------|-------|------|-----------|---------|------|-------|
| 1. mayse | dus | mums | shoden ; | pammate | mums | muffe |
| 2. maifi | dohdi | mums | shodeen ; | pametti | mums | muhfu |
| bread | give | us | to-day ; | remit | us | our |

- | | | | | | |
|-------------|----|------|----------|-------|----------------|
| 1. grakhe, | ka | mes | pammat | muffe | paradacken ; |
| 2. grehkus, | kà | mehs | pamettam | muhfu | paradneekcem ; |
| fins, | as | we | remit | our | debtors ; |

- | | | | | | | |
|-------|-------|------|---------|-----------------|-----|-----------|
| 1. ne | wedde | mums | louna | badeke ; | pet | passartza |
| 2. ne | weddi | muhs | launa | kahrdinashana ; | bet | passargi |
| not | lead | us | in evil | temptation ; | but | deliver |

- | | | | |
|---------|------|-------|--------|
| 1. mums | nu | wuffe | loune. |
| 2. muhs | no | wiffa | launa. |
| us | from | all | evil. |

The Livish language is indeed still in being; but, as it is confined solely to the boors in Salis, a tract not more than seven english miles in length on the coast of the Baltic, and they so mixed with the Lettes, that they might rather be called Lettes than Liefs, is in danger of becoming, in no long space of time, altogether extinct, it may not be totally useless to preserve such words and phrases as Mr. von Effen, superior pastor at Riga, was able to gather up amongst them.

God, *Yummal*
 Heaven, *tauge*
 The sun, *pehva*
 The moon, *kub*
 A star, *tehd*
 A cloud, *pillud*
 Rain, *vihme*
 Rainbow, *vickerkahr*
 The earth, *mah*
 Sand, *yuge*
 Man, *imie*
 The soul, *yenge*
 The body, *lee*
 The head, *peh*
 The hand, *kehse*
 The foot, *yalge*
 Flesh, *offa*
 Bones, *luh*
 A garment, *vamse*
 A pelice, *kaaska*
 Trousers, *vsadde*
 Stockings, *tucka*
 Boots, *sapkad*
 Shoes, *kenge*
 The town, *nine*

The village, *kiulla*
 The house, *ohne*
 The church, *pækodda*
 The preacher, *pæp*
 Husband, *mehs*
 Wife, *neine*
 Child, *lapse*
 Father, *issa*
 Mother, *yemmaad*
 Son, *pohge*
 Daughter, *tubta*
 Horse, *ubbi*
 Mare, *keeve*
 Foal, *vahrse*
 Ox, *ehрге*
 Cow, *neema*
 Calf, *vaiskas*
 Ram, *ohnis*
 Sheep, *lammase*
 Lamb, *lammohni*
 Boar, *orkas*
 Swine, *shicka*
 Pig, *porrase*
 Goose, *kohs*
 Duck, *publ*

Cock,

Cock, <i>kicka</i>	To feel, <i>muislkab</i>
Hen, <i>kanna</i>	To go, <i>leeb</i>
Fish, <i>kallad</i>	To pass, <i>brauzma</i>
Net, <i>virge</i>	To ride, <i>ratzt</i>
Boat, <i>laia</i>	To sow, <i>kiullab</i>
Sea, <i>merr</i>	To sit, <i>istob</i>
River, <i>yogg</i>	To stand, <i>rurtub</i>
Bridge, <i>shilde</i>	To call, <i>rutz</i>
Mountain, <i>paald</i>	To obey, <i>kubl</i>
Stone, <i>kihv</i>	To love, <i>milub</i>
Bread, <i>lebe</i>	To hate, <i>nidub</i>
Salt, <i>sale</i>	To tell, <i>utlub</i>
Butter, <i>vuit</i>	To speak, <i>pagateb</i>
Milk, <i>sehmde</i>	To think, <i>mutlub</i>
Rye, <i>rugid</i>	To ask, <i>kiussub</i>
Barley, <i>odred</i>	Good morning, <i>yo omaga</i>
Oats, <i>kabrd</i>	Good day, <i>yo paeva</i>
Wheat, <i>nissud</i>	Good evening, <i>yo iddug</i>
Peas, <i>yehrnde</i>	What are you doing? <i>mis tei</i>
Beans, <i>pubbad</i>	<i>yutiet?</i>
Turnips, <i>naggrad</i>	Are you in health? <i>kas tei terud</i>
Flax, <i>linnad</i>	<i>ohdi?</i>
Hemp, <i>kanne</i>	Let us go, <i>ubrgemi leed</i>
Garden, <i>tarra</i>	Come with me, <i>tulgid min</i>
Apple, <i>ummare</i>	<i>imis</i>
Table, <i>lobde</i>	Stay here, <i>yeed ten</i>
Stool, <i>kresle</i>	Farewell, <i>illagid terronis</i>
Bench, <i>penke</i>	Good night, <i>maggo terronis</i>
Candle, <i>kuhndel</i>	To keep a wedding, <i>kafen</i>
Candlestick, <i>luckter</i>	<i>piddahym</i>
The door, <i>uck</i>	To curse, <i>vannup</i>
The window, <i>leep</i>	The devil fetch thee, <i>votha</i>
To hope, <i>lodhub</i>	<i>teid kurre</i>
To hear, <i>kulupp</i>	May thunder kill thee, <i>putki</i>
To see, <i>neeb</i>	<i>las tei robg</i>
To taste, <i>shmeske</i>	That is certainly true, <i>se om</i>
To smell, <i>aistab</i>	<i>tobdft en toihs</i>

INDICATIVE MOOD.

Present.	{	S. Minna om, I am.	Pl. Mee omme, we are.
		Sinna om, thou art.	Tee oti, ye are,
		Temma om, he is.	Nemmat, <i>or</i> need toist, they are.

Imperf.	{	S. Minna oll, I was.	Pl. Mee olme, we were.
		Sinna oll, thou wast.	Tee olte, ye were.
		Temma oll, he was.	Nemmat, <i>or</i> need olte, they were

Perfect	{	carent.
Plusquamperf.		

Future.	{	S. Minna lime, I shall	Pl. Mee lime, we shall <i>or</i>
		or will be.	will be.
		Sinna lime, thou shalt	Tee lime, ye shall <i>or</i> will
		or wilt be.	be.
		Temma lime, he shall	Nemmat, <i>or</i> need lime, they
		or will be.	shall <i>or</i> will be.

CONJUNCTIVE MOOD.

Plusquamperf.	{	S. Minna olgska, I should	Pl. Mee olgska, we should have
		have been.	been.
		Sinna olgska, thou	Tee olgska. ye should have
		shouldst have been.	been.
		Temma olgska, he	Nemmat, <i>or</i> need olgska, they
		should have been.	should have been.

All the other tenses are wanting.

IMPERATIVE: Oth, be thou. Othe toi, be ye.

INFINITIVE: Olde, to be.

I have before me a collection made by the pastor of another parish ; but, as the reader will probably think the foregoing specimen quite sufficient, I shall here terminate this article.

SECTION III.

Mongoles.

FROM the cold northern regions of the Finns, we now proceed across the south-eastern asiatic steppes to the confines of modern Siberia, there to trace out the primitive seat of a nation, once the terror and the scourge of more than one quarter of the world, which has spread itself over a great part of both the northern and southern hemispheres, and whose furious thirst of conquest, for several ages together, has plunged Russia into dissolution and ruin.

The MONGOLES*, a nation remarkable as the disturbers of the world, everywhere extended their ravages, as if the annihilation of the human race had been their ultimate object. Had not their violences brought about revolutions in the state of governments and of mankind, and produced consequences that are still visible, the historian would never have profaned his pen by recording the catastrophes of these barbarians, and their bloody

* That, contrary to the usual position of the nations of Russia, the Mongolians are treated of before the Tartars, is, because the events that befel the latter, inasmuch as they concern the Russian empire, are comprehended in the Mongolian history, by which method the succeeding account of the Tartarian nations is rendered more easy and familiar.

trophies would long ago have been consigned to oblivion.

The antient history of the Mongoles is partly quite unknown and partly fabulous. In the ninth century three nations appeared roaming about the northern side of China and Korea, in countries whereof the Greeks and Romans had never heard: in the west, or in modern Mongolia, the Mong-u, who in the sequel were called Monk-kos and Mongoles; farther to the east the Kitanes; and, lastly, beyond Korea as far as the Eastern-ocean, the Niudsches or Kin, who are, generally speaking, the same people with the Tunguses, and the Mandschu the present sovereigns of China. These three people, who, gathering by degrees, grew at length to be great ruling nations, were at that time weak and inconsiderable. In the tenth century the Kitanes first subdued the two other nations, and then the northern provinces of China. The Niudsches, however, soon rose in rebellion against them, were called in to their assistance by the Chinese, and now got the upperhand of them as well as of the Kitanes. Upon this, a part of the latter retreated westwards, and took possession of the lesser Bukharia, where they have since bore the name of Karakitans or Karakitayans. In the mean time the Niudsches ruled over the north of China and the Mongolèy as far as the Eastern-ocean. The Mongoles were divided into several hordes, who, notwithstanding the

the supremacy of the Niudsches, had their own khans. It was one of these petty princes, Temudschin, who, under the name of Tschinghis-khan, became the founder of a new monarchy, and one of the most memorable ravagers of the world.

Temudschin was thirteen years old when, on the death of his father in 1176, he became sovereign of forty thousand families: but, amidst the sanguinary quarrels that broke out among the khans of the different hordes, he soon found means by his bravery and fortitude to render himself the most powerful prince of the whole Mongoley. In order completely to become the general khan, and to enable himself to put in execution the great plans of conquest that were hatching in his restless mind, he had recourse to the patronage of superstition, as the most effectual means to despotism. At a grand council, which, in 1206, was held at the sources of the river Onon, a khodsha or sage, who passed among the people for a prophet and favourite of the deity, publicly entered, announcing to him the dominion of the world, and requiring him, on the part of God, to assume henceforward the appellative of Tschinghis-khan.

Thus it was that Tschinghis began his formidable career, which lasted twenty years; during which time he desolated the countries and subjugated the people from the Mongolèy and from China to the farther Asia, and in Europe quite up to the shores
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of the Dniepr. If, however, we stop a moment to examine the condition of the european and the asiatic states at that period, we shall no longer be astonished at the progress made by the arms of Tschinghis, but shall rather see cause for surprise that they penetrated no farther. We shall not here detain the reader with the detail of his victories and conquests, but shall only observe in general the rapid aggrandizement of the mongolian monarchy, and particularly as it stood in relation to the russian state.

In the first three years of his warfare Tschinghis subdued the Naimanes, Kirghises, and the other tartarian hordes. He received the voluntary submission of the Igures, a polished nation who communicated the art of writing to the Mongoles, from whom afterwards the Mandschu received it. About the same time Tschinghis pressed forward into the north-western parts of China, and made the king of Tangut his vassal. Soon after this he turned his arms against the Niud-sches, proceeding in his conquests, murders, and rapine, as far as the capital of Irnking, forced it to surrender, and found in it the wise Ilid-schutzay *, a truly great and noble-minded man, whom he made his first officer of state; and who,

* This man, however harsh his name may sound, highly merits to live in the hearts of all the friends of mankind; he was a descendant of the dethroned imperial house of the Kitanes.

not only rescued several millions of persons from their impending fate, that would otherwise have fallen victims to the savage Mongoles, but who also may justly be said to have created the mongolian state, by polishing the manners of that people, and, as far as he was able, disseminating the arts and the sciences among them.

While the Mongolian army was fighting against the Niudsches, in 1217, the flames of war broke out with increasing fury on the western side of the mongolian empire, which in the sequel communicated to all the countries round, and the Mongoles advanced to nether Asia, and thence again to Europe. — Keschluk, king of the Naimanes, who had conquered Karakitai, roused the Kanglians*, the Kaptschaks, the Kitanes, and several adjacent nations, to take up arms against the conqueror. Tschinghis, upon this, committed the prosecution of the other wars to his son Tutchi and various commanders, while himself marched against Keschluk, whom he defeated, and the country submitted after a short resistance. He now hastened to meet the sultan of Khovaresm†, who had caused his ambassador to be slain. This prince was undoubtedly his mightiest and most dangerous adversary; but he

* These are the Petschenegrans, as they are called by the russian and polish chronologists. They denominate themselves Kangar or Kangli.

† Khovaresm was a state torn off from the great empire of Seldschuk, which had been founded by turkish nations.

was

was likewise obliged to submit to the mongolian conqueror. In the year 1220 the capital Khovarefm was captured, on which occasion the number of the killed amounted to upwards of a hundred thousand persons, and every mongolian warrior received four-and-twenty slaves to his share.

About the same time all the countries and nations round as far as the Oxus submitted to his arms. Tschinghis now dispatched an army across that river, who took Khorosan, and drove the new khovarefmian sultan to India. A second was still continually fighting in China against the Niudsches; a third was making conquests in Kaptschak, on the north side of the Caspian, and even a fourth, which had already reduced the countries on the south side of that sea, was now advancing against the Kaptschaks. This is the army which proceeded quite up to the Dniepr. The Alanes, or Daghestanians, were already conquered, and the fierce Mongoles were still pressing hard on those Kaptschaks, which in the russian year-books are called Polovtzes, on their retreat to the russian borders with the grand-prince of Kief, and now with united forces fell upon the common foe. Unhappily here also the fortune of war decided in favour of the mongolian ravagers. In 1223 the Polovtzes and Russians lost the great battle on the Kalka *, and were pursued as far as

* This battle cost six russian princes their lives, and scarcely the tenth part of the army returned.

the Dniepr by the Mongoles, who, however, this time did not penetrate into Russia ; but, laden with immense booty, returned by Kaptfchak to Bukharia, to the great Tschinghis.

In this very year, from which we date the commencement of the most unfortunate period for Russia, Tschinghis convoked a general diet, in which the form of government to be adopted for the conquered countries was settled*. This insatiable conqueror, like Alexander, had formed the plan of penetrating into India ; but here also the same thing happened to him as to his grecian predecessor : the army refused to proceed farther. — After an absence of seven years, Tschinghis, in 1225, returned to his Mongoley ; but presently after, that is, in the following year, he found himself obliged to undertake a campaign against the rebellious Tangut. The Mongoles penetrated across the great sandy desert into that country, and were victorious everywhere ; the royal race was exterminated, and the inhabitants were slaughtered in such shocking multitudes, that scarcely one in fifty was spared. After this conquest, Tschinghis had just conceived the idea of putting an end to the empire of the

* What sort of a spirit presided in this assembly may be judged of by a single circumstance. Some of the grandees advised Tschinghis to exterminate all the inhabitants of the conquered countries in China ; and it was with difficulty that Ilidschutzay put aside the proposal.

Niudsches in China, when death, in 1227, surprised this destroyer in the midst of his dreadful projects.

Tschinghis had bequeathed to his son Oktay the sovereignty of his dominions; but this prince, as well as his three successors, were properly no more than the grand khans of the prodigious mongolian empire, with whom their brothers and relations at the same time reigned in large tracts of country as princes, though dependent on the grand-khanate*.

Oktay first put an end to the empire of the Niudsches in China, and reduced the whole northern China to his authority. Shortly after this he made war upon the kings of Korea †, who had risen up against his supremacy, and now took the resolution, with an army of more than a million and a half of

* Tschinghis in his lifetime had made the following settlement among his four sons: 1. Oktay to be grand-khan, and to have the Mongoley, Tangut, and the countries already taken from the Niudsches. 2. Taulai obtained Khorasan, the rest of Persia, and the indian conquests. 3. Dschagatai had the greater and the less Bukharia, Turfan, the country of the Igures, and a part of the present Kalmuckey. 4. Baaty, a nephew of Tschinghis, whose father was already dead, received Kaptschak, or the countries on the north side of the Caspian, with all the conquests thenceforth to be made on the european side.

† This title will be surprising to none who know that it was a part of the policy of the Mongoles to leave an apparent dignity to the princes in the conquered countries, as they also did in Russia.

men,

men, to overrun the world from one end of our hemisphere to the other. Putting himself at the head of six hundred thousand of his troops he marched against the dynasty of Song in southern China ; while, at the same time, the main body of his army, under the command of his son Kayuk and his nephews Baaty and Manku, proceeded to the west. On their progress they subdued the Tscherkasses and Avkhases, penetrated the Baschkirèy, into Kazan and Bulgaria, and finally came to Mosco. Fourteen russian towns were burnt in one month [February 1238] : Baaty pushed on towards Novgorod, and ordered all the inhabitants on his passage to be massacred. However, while yet a hundred versts from Novgorod he suddenly turned about, and hastened back to the regions of the Polovtzes and Bulgarians on the Volga. After several repeated attacks from the Mongoles, each of which exceeded the former in cruelty, most of the russian princes ran off to Poland and Hungary, and left the dispirited people to the fury of these military barbarians. At length, after a desperate resistance of ten weeks, Kief surrendered [1240], and received a mongolian viceroy. The grand-prince of Vladimir did homage to the khan of Kaptschak, who confirmed him in his government and in the paramount lordship over the other princes. However, they made a voluntary submission of themselves to the mongolian supremacy, that they might not be the

4 vassals

vassals of their brethren. All Russia, except Novgorod, was now tributary to the Mongoles, who appointed viceroys everywhere, though without expelling the russian princes. Baaty khan, by two great armies, ravaged Poland, Silesia, and Moravia; marched himself with a third to Hungary, pillaged and murdered all around, both here and in Slavonia, Bosnia, Servia, and Bulgaria; and then, by a three years absence, gave some respite to the plundered and desolated provinces of Russia.

At the same time, while the Mongoles were committing such horrors in Europe, and were prosecuting the war against the Koreans and the southern Chinese, they overran likewise the hither Asia with their numberless hosts. Oktay had summoned in vain the feldschukian sultan of Iconium to do him homage; he now sent a stronger force through Tscherkassia, to make an incursion upon Armenia. The Mongoles penetrated into the regions of Arbela, marched through Niniveh, approached Bagdat, conquered Erzerum, ravaged and subjugated several cities and districts of the lesser Asia, and made [1242] the sultan of Iconium their vassal. In the following year they carried their inroads into Syria, and came to Aleppo. However, in this year Oktay died, of the consequences of a propensity, worthy of this universal despot*, and his death saved Asia for a time, and Europe for ever.

* He died by the effects of a fit of drunkenness, in his residence Karakorum.

To the reign of this odious tyrant an interregnum succeeded of four years, during which the wise Ilid-schutzay died of grief at the increasing desolation of the country which was now become his second home*. The succeeding grand-khan Kayuk was busily employed in making formidable preparations to carry the war over all Europe, when his sudden death defeated these projects. — His successor Manku abolished the kaliphate, and subjected the sultan of Iconium and all Asia minor, as far as the straits of Constantinople, to the mongolian authority, while his brother Koblay, as viceroy of China, prosecuted the war against the Song with vigour.

On Manku's death [1259] Koblay was elected grand-khan; this prince, however, remained in China, and in manners and knowledge was a perfect Chinese. The distance of the paramount sovereign from the other mongolian states, which extended from the eastern ocean as far as the Dniepr and the

* The widow of Oktay, by whose intrigues that prince was thwarted in all his ordinances, now set herself up as regent of the empire, in which office she was continually making innovations that tended to general mischief. These, against which Ilid-schutzay was ever exerting his utmost efforts to no purpose, were the chief cause of his vexation. On his death, instead of the vast treasures that were expected, no property was found in his possession, except several books composed by himself, on history, astronomy, and political œconomy; collections of coins, maps, pictures, &c. Who does not feel satisfaction at finding one man, worthy of that name, among such a horrid crew of blood-thirsty barbarians?

Mediterranean sea, accelerated by discord and ambition the dissolution, already prepared, of this enormous monarchy, which now separated into the following still very extensive states : 1. China. 2. Iran; or Persia as far as the hither Asia. 3. Dschagatay; so called after its founder, as has been remarked above in speaking of the division under the successors of Tschinghis. 4. Kaptschak. 5. Turan.

Koblay renewed the war with the Song, which at length terminated in the downfall of that dynasty, and the entire conquest of the southern China. — This line of the Tschinghises formed itself completely on the pattern of the Chinese: with the ferocity of the Mongoles, they lost also their martial character, and were at last driven back into the Mongoley by the native dynasty of Ming, where their posterity, under the name of Kalkas-Mongoles, at present live in submission to the sceptre of the Chinese. — The circumstances attending the Tschinghises of Iran and Tschagatay are beside the limits of the plan we proposed to ourselves in this historical relation; but so much the nearer are we interested in the states of Kaptschak and Turan, as the revolutions effected in them are intimately implicated in the history and the present condition of the Russian empire.

We have already seen in what manner the state of Kaptschak was founded by Baaty, the kinsman of the great Tschinghis, and that from 1240, the greater part of Russia was subjected to these princes.

Koblay,

Koblay, at the commencement of his reign, likewise made Kaptschak independent; in pursuance of the example set him by his predecessors in regard to the other states of the mongolian empire: and from that time forth it was no longer the mongolian grand-khan, but the khan of Kaptschak, under whose supremacy Russia subsisted for upwards of two hundred years. In order to rectify a slight mistake, we will here endeavour to explain how it happened that this mongolian sovereignty is constantly termed the tartarian in the russian year-books. Mongoles and Tartars are, in their origin, manners, and language, two entirely distinct nations: but, on the subjugation of the generality of the tartar hordes by Tschinghis, the two nations were ever more and more assimilating with each other. The kaptschak empire, besides its own army of mongolian warriors destitute of women, had for its inhabitants only genuine Tartars, and by little and little the troops were even completed by Tartars. It was therefore in fact not only Tartars who maintained the mongolian sovereignty over Russia, but even the Mongolians became in Russia real Tartars, to which the introduction of the mohammedan religion into Kaptschak, under the successors of Baaty, contributed not a little.

From Baaty's time till the year 1441, Kaptschak formed a large and well-compacted state, governed in an uninterrupted line by the successors of that prince. During the former half of that period the russian princes made little or no attempts to rid

themselves of this foreign sovereignty ; but about the middle of the fourteenth century the germ of decay began to expand itself in the mongole-tartarian state. The throne now, on every vacancy, had several competitors, each endeavouring to enforce his pretensions by arms, and the approaching downfall of the empire was, amidst these disturbances, growing more apparent from day to day. The first proof of this was given by the russian grand-prince Dmitri Donskoy, who, in the year 1380, vanquished the khan Mamai in a signal and bloody battle on the Don. Yet, it was long before any consequences favourable to the Russians arose from this victory, and two years afterwards Mosco was again laid waste by the Tartars. In the mean time, however, the demolition of the kaptschak empire was hastily advancing, and in the year 1441 it crumbled into four smaller states, which in the space of a century afterwards lost themselves in the russian body politic, now liberated from its yoke and increasing in power. These states were: 1. The khanate of Kazan. Ivan I. had already freed himself from the shackles of dependency, which his predecessors had riveted on this empire, and reduced the khan Ahmed, from a paramount lord, to be a tributary vassal ; but Ivan's successor saw his country yet several times ravaged by the Tartars of Kazan, and himself under the necessity once more to take the oath of fealty. The complete annihilation of this
tartarian

tartarian state was the work of Ivan II. who in 1552 united the empire of Kazan to Russia for ever. — 2. The khanate of Astrakhan fell two years later [1554] into the hands of the same victorious chieftain; who, amidst these conquests, gained also the greater part of, 3. The khanate of Kaptischak. That part of this state, which upon the separation of the other three khanates still remained, lost, in the year 1506, its last khan, and the remainder of Kaptischak was partitioned among the khans of the Krimea, of Kazan, and of Astrakhan. 4. The khanate of the Krimea was in the year 1783, without the help of the sword, incorporated by Catharine II. with the russian empire; and thus the last branch of the Tschinghises of Kaptischak was brought under the sovereignty of their former vassals.

A similar fate attended the state of Turan; which, as we have already remarked, arose from the ruins of the huge mongolian empire, during the grand-khanate of the Koblay. A brother of Baaty was the founder of this state, on the Aral-chain of mountains and about the Yaik, in countries which had been ceded to him by the latter, and which he himself afterwards increased by conquests in Siberia. The series of the khans of Turan closed with Kutschum, who, being first defeated by Yermak, the famous Kozak of the Don, with his small band of adventurers, afterwards resigned both his empire and his liberty to the Russians. By them, in 1598,

he was brought as a prisoner to Mosco, and the entire conquest of his territories was completed by the subsequent reduction of Siberia.

Ere we conclude this general view of the transactions of the Mongoles, we must take notice of a conqueror from the body of that people, who formed the resolution of restoring the fallen monarchy, and was so fortunate as to execute it in a manner worthy of his predecessors. This new destroyer was called Timur or Tamerlan, and was prince of Kesch near Samarkand, about the time when the Mongoles were everywhere disheartened, and were entirely expelled from China. His dominion took its rise in the great Bukharia, a part of the ancient Dschagatay. After various turns of fortune*, he succeeded in the reduction of that empire; in the year 1369, he received the homage of the grandees and the title of the Sovereign of the World. From this time forth Timur became as great and general a plague as Tschinghis. In 1371 he invaded Khovaresm, conquered Kaschgar, hurled the khan of Kaptischak from the throne, and set up another in his place; took the city Khovaresm, and made himself master of all Khorasan and Sedschestan, while his generals subdued the Avchanians, and

* On a flight which had once well nigh defeated all his prospects and hopes, he was so poor that he had nothing in the world but a sorry horse and an old camel; he, who twenty years afterwards threw the three quarters of the old world into terror, and visited them with desolation,

captured

captured Kandahar. At the close of the year 1384, he put himself in possession of most of the countries from Persia to the borders of Armenia; shortly after which he laid waste all the tract from Ili as far as the Irtysh, routed the khan of Kaptfchak, marched onward to the Volga, and then returned to Samarkand. On opening the campaign of 1393, he made conquests in southern Persia, took Bagdat and various other cities of Mesopotamia and Georgia, forced his way through Derbent into Kaptfchak, ravaged Mosco, and conquered Azof; then prosecuted the subjugation of Persia, and again returned to Samarkand. In the year 1398 he set out upon an expedition to India, and crossed the Ganges. At the commencement of the succeeding century, he made an incursion into mammeluk Syria, conquered Aleppo, Damascus, and once more Bagdat: this done, he proceeded again to Georgia, forced Natolia to surrender, defeated Bajazet, made him his prisoner, and laid the emperor of Constantinople, the sultan of the Ottomans, and the Mammeluks, under heavy contributions. After this he made another expedition to Georgia; and, in 1404, repaired again to Samarkand. At this place he was attacked by a severe and tedious illness which terminated in his death, just as he was forming the project of marching to China, there to restore the dominion of the Mongoles. — As suddenly as this common disturber had completed his amazing conquests, so

rapid'y did they fall away under his successors, who lost one after another all the countries which Tamerlan had left them to the Bukharèy and Khorazan; and even these the last khan, Babur, in 1498, was obliged to abandon, who, however, from an outcast and a fugitive, became the founder of the state of Grand-Mongolia in Hindostan.

Such were the remarkable catastrophes of a nation, which now, degraded from its former grandeur, has scarcely any longer a memorial of it; and at present can only recollect, as in the obscure and faint representations of a dream, that it once was a nation which domineered over the world*. With the fall of the great mongolian empire of the Tschinghises, began also the epocha of their decline; the dissolution into smaller states, which parted again into smaller still, and were then reduced to subjection, at length brought about a division into stems and hordes, and consequently a complete retrogradation from the state of civilization to the condition of raw uncultivated man. — We will for the present pass over the period in which this singular decline took place, in order the sooner to acquaint ourselves with the state of the mongolian nations at this day; and afterwards endeavour to trace out the particulars most worthy of notice in the

* The chief source of mongolian history is in the chinese records. The Buræts have only imperfect traditions; but among the Kalmuks and Mongoles are genealogical registers of their princely races, which likewise contain other historical accounts.

history of the several races, since the destruction of the mongolian dominion.

It appears that many centuries ago the Mongoles were divided into two leading nations, whose partition might probably be owing either to national circumstances, or to a natural separation by mountains, and afterwards kept up by the separate interests of their princes, or from a national enmity arising from perpetual dissensions. These two nations were brought to a union into one common state by the great Tschinghis; but, on the destruction of the monarchy erected by him, they were separated again by the antient feuds, and have ever since, to their mutual ruin, been engaged in almost perpetual hostilities. The Mongoles, properly so called, compose the one, and the Dœrbœn-Oiræt the other of these nations.

Dœrbœn-Oiræt means the Quadruple-alliance, and is the common appellative of four principal races, namely, the Cœlœt, Kho-it, Tummut, and Barga-Burat. The Cœlœt are properly that branch, which in western Asia and in Europe, are known under the name of Kalmuks: the second shoot, Kho-it, is, by wars and migrations, so effaced and dispersed, as at present, except some remains among the Soongares and Mongoles, to be totally vanished: of the Tummut, even the place of their present abode is not certainly known*: and the fourth and last stem, Barga-

* The Kalmuks themselves have no knowledge whither this stem retreated; they only believe that they must still be subsisting somewhere

Barga-Burat, which probably at the time of the troubles excited by Tschinghis took up its residence in the mountains about the Baikal, has, with all its branches, ever since the conquest of Siberia, been under the russian sovereignty. — Of these four stems, therefore, only the first and the last are a subject for history; as they, with the Mongoles, are the only mongolian tribes, with which, either here or in the sequel, we have anything to do.

1. The MONGOLES comprehend the remainder of that people, who, as we have seen above, were driven out of China in the fourteenth century by the dynasty of Ming, and are at present for the most part under the Mandshur sovereigns of that empire; though a small portion of them own the russian sceptre. Since the demolition of the soongarian authority, and the restoration of peace in the Mongolèy, they have dwelt in the spacious region between Siberia and proper China, from the Eastern-ocean to the Soongarèy, and at present there is scarcely any discernible difference between the yellow Mongoles *, living from remote ages under the chinese protection, and the former Tschinghises or Kalkas-Mongoles.

somewhere in the interior or eastern parts of Asia. As, according to authentic accounts, a populous mongolian race called Tûmut, now inhabits the region between the river Naun and the chinese wall, we may, with great appearance of probability, suppose it to be the lost race of Oirat.

* Scharra-Monggol.

When Siberia was conquered by the Russians at the beginning of the seventeenth century, the Mongoles were still a free and numerous people, governed by its own khans, under whose sovereignty also were several Siberian nations. They at first submitted to the Russian arms ; soon afterwards however they regained their liberty, and even granted support to several of the nations of Siberia in their resistance to that power. In their intestine wars with the Kalmuks they generally came off conquerors, with the loss however of one race after the other. Their frequent and bloody wars with China turned out still more unfortunately for them, as their perpetual feuds finally terminated in a complete subjugation. Continually harassed by the Chinese government, they are at present almost totally out of condition to risk any attempts at liberating themselves from the yoke ; though they have preserved their paternal seat, and ostensibly live under the government of their own hereditary princes *.

The Mongoles, at present among the inhabitants of the Russian empire, in the last century withdrew

* China kept in the Mongolèy a considerable number of forts, at which the chieftains of the Mongoles were obliged to stop. These formerly obtained from the Dalai-lama the title of khan or Khun-taidshi ; at present they are forced to submit to have their officers appointed by the Chinese. The nation itself is put under a military form of government, in lieu of the tribute, not unlike to that of the Kozaks ; and through the continual and heavy service, not only very burdensome, but renders them contemptible in the eyes of the Chinese, who hold the state of a soldier to be almost infamous.

themselves

themselves from the chinese dominion, and voluntarily put themselves under the russian supremacy. This example, in all likelihood, would have been followed by several other races, if Russia had not bound herself in a border-treaty with China at the beginning of the 18th century, not to give admittance any more to mongolian runaways. The russian Mongoles inhabit the regions about the Selenga in the irkutskoi district of the government of Irkutsk, their dwelling-place extending from the 122d to the 125th degree of longitude, and between the 50th and 53d degree of north latitude. They consist of seven stems, and these of twenty families or aimaks, which, by the enumeration of the year 1766, besides 219 baptized, comprised 6918 males.

2. The **ÆLÆTS** or **KALMUKS** are at present the most remarkable branch of the **Dœrbœn-Oiræt**, as in general of the mongole nations. They themselves affirm their home to have been between the **Koko-noor*** and **Thibet**. Long before **Tschingis-khan**, according to the old reports of this people, the greatest and mightiest part of the **Ælæt** made a military expedition westward as far as the lesser Asia, and there lost themselves among the mountains of **Caucasus**; but the rest, who had staid behind in great Tartary, received from their tartarian neighbours, the name **Khalimak** [the separated]. In fact, they call themselves also **Khalmik**, though **Ælæt** is always their peculiar denomination, which word likewise denotes a separated, disjoined, or distinct

* Blue lake.

nation. — The Celöets divide themselves, at least since the destruction of the mongolian monarchy, in four main shoots, who denominate themselves Khoschor, Derbet; Soongarr, and Torgot; and, from the time of their separation from the Mongoles, have all along been subjected to various princely families.

The major part of the KHOSCHOTAN Kalmuks are said to have kept in and about Thibet and on the Koko-noor, and after the downfall of the soongarian power to have remained under the protection of the Chinese. The smaller part of this stock had long before withdrawn to the banks of the Irtysh, and fell at length under the dominion of the soongarian horde, with which it made common cause in the wars against China, and was also dispersed at the same time with the Soongarians. Those under the chinese sovereignty, the still united horde of the Khoschotes, are estimated at fifty thousand heads. They are reputed to have had their name, which implies warrior or hero, from the courage they displayed under the command of Tschinghis; and, as well on account of this circumstance, as because they derive their princely race in uninterrupted succession from the brother of the great Tschinghis, they preserve a superiority of rank before the other kalmuk hordes. — The number of the Khoschotes subject to Russia is but small. In the year 1675 there came fifteen hundred, and in 1759 an additional three hundred families to the shores of the Volga, where they settled and voluntarily submitted to the russian sovereignty.

The SOONGARES, at the separation of the mongolian monarchy, formed but one stock with the Derbetans, who afterwards parted, under two discordant brothers of their princely family. It was this horde, which in the last and at the beginning of the present century, reduced to their subjection a great part of the other kalmuk races, particularly the Khoschot, Derbet, and Kho-it, and waged bloody wars with the Mongoles as well as with the chinese empire itself, but which ended in their total subjugation and dispersion. Previous to this unhappy period, they, together with the Derbets, numbered upwards of fifty thousand bows, or fighting men, and passed in modern times for the bravest, richest, and most powerful horde. Their seat was formerly about the Balkhash-lake and its rivers Tschuy and Ily, and their most flourishing period was between the years 1696 and 1746. The towns of the eastern Bukharia and the great kirghise horde were about this time tributary to them. They conquered Budala, the capital of the Dalai-lama, and raised contests in Siberia, where they made tributary some nations belonging to Russia. On the death of their khan Galdan Zeren, a dissolution of the horde ensued, occasioned by disputes concerning the succession, when the Torgots, the Khoschotes, and Derbets separated from it. A great part of the Soongarians dispersed themselves in the interior parts of Asia, and quite into the usbek towns; some thousands of them fled into Siberia; when the generality accommodated themselves to the chinese sovereignty:

sovereignty: and, from their own statements, it appears, that scarcely twenty thousand families of them and the derbetan nation are now remaining. — The number of the Soongares, who at that time [1758] took refuge in Russia, amounted to about twenty thousand heads; they were united with the volgaic Kalmuks, but for the most part returned with them in the year 1770 again into the Soongarèy.

The DERBETANS, who in the beginning had their pasturages in the region of the Koko-noor, removed thence, on account of the mongolian disturbances, towards the Irtysh, and, on that occasion, split into two parties. One of them united, as we have before observed, with the Soongares, in whose fortunes and final dissolution it was at once involved; the other proceeded westward with the Torgots, towards the Yaik, [now Ural], as far as the Volga and the Don, where it completely settled. So long ago as the year 1673 they put themselves, five thousand kибиткиес [tents or families] in number, under the khan of the Torgots, who were then on the river Ural, and did homage to the russian empire. In the sequel the derbetan princes, unwilling to remain any longer in subjection to the Torgots, went, on the death of khan Ayuka in 1723, with their people to the parts beyond the Don; at that time they were estimated at fourteen thousand kибиткиес. Since that time the russian government had reason to oblige the khan Lava Donduk to put himself under the protection of the khans of the Krimea; and this occasioned the horde to remove once more to

to join the Torgots on the Volga. In the famous flight of the year 1770 they took no part, as they dreaded the being subjugated by the Torgots, but remained quiet under the prince Zenden, on the shores of the Volga.

The TORGOTS seem to have formed themselves into a particular horde much later than the other kalmuk branches. At first they removed from the restless Soongares, marching constantly westward till they came to the steppes on the Volga, where they finally settled, and received from the Russians the appellation of the volgaic Kalmuks. In the year 1616, this horde is said to have submitted to the russian empire; at their crossing the Ural in 1662, they numbered themselves, and found the amount to be fifty-thousand kibitkies. Their forenamed khan Ayuka brought a great part of the nogayan Tartars into subjection at the time when the latter were intending to spread themselves beyond the river Ural; one of the sons of this prince took his flight with fifteen thousand kibitkies into the Soongarèy. Khan Dunduk Ombo, the successor of Ayuka, reduced six thousand tents of Truchmenians and eight thousand tents of khundurovian Tartars under the command of his horde, from which, however, the major part of the latter fled back. In the year 1761 the russian government came to an agreement with this opulent and powerful horde which restricted the authority of the khans to narrower bounds, and excited such discontents, that they returned in the winter of 1770 and 1771 to the amount of between
fifty-

fifty-five and sixty thousand kïbitkies, over the ice of the river Ural, across the kirghisian steppe, into the Soongarèy. This memorable transaction, which in the eighteenth century, and within the borders of a polished state, presents a lively image of the ancient migrations of swarms of people, principally took its rise from the irritation of the khan, on his being associated with deputies of the princes of the horde, whom he could not depose at will, and who received an assessor from the chancery of the government of Astrakhan; seconded by the complaints of the people of the want of pasture for their numerous droves, and the prophecies of the clergy that the horde would soon be compelled to adopt the christian faith, to follow agriculture, and to deliver recruits. — It has already been observed, that even the greater part of the Soongares took part in this migration; only some few aimaks of the Torgots remained behind; but the Tartars in subjection to the horde refused to follow them. The russian government, indeed, caused the fugitives to be pursued, but they fled with such velocity, that only a few of them were overtaken and brought back. Numbers of them perished on this painful journey: a great part were taken prisoners by the Kirghises; and those who reached the place of their destination put themselves under the protection of the chinese government, who immediately gave them a kind reception, but, for political reasons, afterwards treated them with extreme severity*.

* See the Life of Catharine II. 4th edit. vol. ii. p. 158, & sqq.

The whole amount of the Kalmuks that remained in Russia, were estimated a few years ago at somewhat more than twenty-thousand tents. These are the remains of all the four stems; but the Khoschotes, the Soongares, and Torgots, who either staid or were caught on their flight and brought back, and are distributed among the Derbets, who, besides several petty princes, have a taidscha or khan presiding over them. They wander, with their flocks and herds, in the steppes between the Don and the Volga, from the line of Tzaritzin as far as Caucasus; and between the Volga and the river Ural, from the Irghis quite to the Caspian; therefore in the governments of Saratof and Astrakhan, and in the seats of the Kozaks of the Don.

In addition to these there is still a particular and numerous colony of BAPTIZED KALMUKS. Towards the close of the last century many, even distinguished and noble, members of this nation began to profess themselves of the christian faith. As the neighbourhood with their unbaptized fellow-races gave occasion to disagreements and controversies, the government, in the year 1737, established the former in a fruitful region about the rivers Samara, Sok, and Tok, (in the present government of Simbirsk, and in the orenburg district of the government of Ufa,) and granted them also the city of Stavropol, which is now a chief town of the government of Simbirsk. The increase of this colony was so considerable, that in the year 1771 they could reckon nearly fourteen thousand

thousand heads, whereas in 1754 they were only eight thousand six hundred and ninety-five.—There is yet subsisting in the government of Ufa a small colony of MOHAMMEDAN KALMUKS, which sprung up from individual profelytes made by the Kirghises and adopted by that body.

3. The third and last mongolian nation, which still merits the name of a distinct people, are the BARGA-BURAT, called by the Russians Buræti or Bratskiye. That this nation composed one of the four stems of the Dœrboœn-Oiræts has been already mentioned. The Burats seem, about the time of the mongolian monarchy, or still earlier, to have taken refuge in the wild mountainous region on the north side of the Baikal, which they still inhabit. Should they even not have avoided the conquering arms of Tschinghis, yet they appear shortly afterwards to have recovered their liberty, when the mongolian monarchy made China its seat of empire, and the stems that wandered about the remoter regions began to disperse. The Russians found this nation in Siberia at their conquest of that country; and from the year 1644 they have peaceably accommodated themselves to the russian supremacy. The whole buræt nation is at present, in consequence of the border-treaty, under the dominion of Russia, and comprizes numerous heathenish people in the government of Irkutsk, where it inhabits the region from the Yenissey, along the mongole-chinese borders, on the Angara, Tunguska, and the upper
Lena,

Lena, about the southern Baikal, on the Selenga, the Argoon, and its rivers. Several years ago this government was computed to contain thirty-two thousand tributary Buræts; and, besides these, there were a few stems and races in the krasnoyarskoi circle of the government of Kolhyvan on the right bank of the Yenissey. If we take into the account the defects of an enumeration attended with so many difficulties, the female sex, and the natural increase of the people in such a succession of years, we may admit their number to be four times as large without trespassing too much upon probability.

SECTION IV.

Tartars.

A FOURTH primitive stock of the nations dwelling in Russia are the TARTARS. This national appellation is so much misapplied, that with some inquirers into history a doubt has even arisen, whether there ever was a peculiar people of that name. Under this denomination have been implied all tribes beyond Persia and India as far as the Eastern-ocean, however differing from each other in regard to their origin, language, manners, religion, and customs. Now, that we are better acquainted with these nations, we know that the Tartars in reality
compose

compose a distinct nation which originally belonged to the great turkish stock *.

The first known mother-country of the Turks or Tartars lies somewhere in the countries on the eastern and northern sides of the Caspian, where their descendants have still their seats. In antient times they were spread from the Axus or Gihon into the Mongoley and the Orenburg territory; that is, in regions where they had constantly ambitious and domineering nations for their neighbours and enemies: on the east side the Chinese; south-westwards the Persians, Macedonians, Romans, Partho-persians, and Arabians; and lastly the Mongoles in the north-east. Here they served

* The name TARTAR may either, 1. really originate from a turkish horde, which bore this denomination, as Abulgasi, the historian of his own nation, affirms, and as from circumstances is very likely, that the Yakutes, among their deities, have a Tatar, who probably enjoys that honour as the patriarch of the nation; or it may also, 2. be derived from the Chinese, who call all their neighbours, without distinction, Tata or Ta-dse; which latter hypothesis acquires some weight from this circumstance, that the Persians and Arabians know nothing of the Tartars under that appellation. It was first brought into general use in Europe after Baaty's incursion into Hungary under king Frederic II. Uncertain, however, as this denomination is, it nevertheless seems clear, that the Tartars are of turkish origin, and that their proper name was Turk or Turkoman, and not Tatar. Not only the learned of their own nation affirm this to be the case, but the tartarian language is still really nothing but the old-turkish. The modern ottoman Turks speak even the tartarian tongue, only in another dialect.

from time immemorial as a mound against the incursions of the nations who would penetrate from the east to the west or contrariwise, till at length the Mongoles, like a rushing stream that has burst its banks, swept away all opposition. In common with other nations, at their origin, the Turks at first divided only into stems and hordes, the names whereof have been preserved to us by the tartar, persian, and chinese historians. A main stock already appears in Herodotus under the name of the Massagetes, whom Strabo acknowledges for brethren of the Khorasmians, and who by a constant repetition of great actions, and by the commerce of the hither-Asiatic and eastern-European nations with Serika, are preserved in remembrance by historians and geographers, though their history is neither connected nor complete. The appellative Turks was borne about the year 545 — how much earlier is not known — only by that part of the nation which had long had its habitations in the Altay-mountains along the Irtysh, where that people in the middle of the sixth century founded a state, which soon became so powerful as to give disturbance to China and Persia, and to have an interchange of ambassadors with the east Romans. In the same century, however, this state split into two great parts, which afterwards separated into several petty khacates, and at length chiefly became a prey to the victorious Arabs, till the primitive Turks succeeded once more in founding considerable states in the kaliphate itself.

Eight turkish tribes by degrees now make their entrance on the stage of history, causing great revolutions both in Europe and in Asia, founding empires, and performing the part of nations aiming at universal dominion. Three of them, who had penetrated early into Europe, attract our attention principally on account of their relations with the russian empire: the Khazares, the Petschenegrans, and the Uzes.

The KHAZARES, a bold and powerful nation, had their original home on the isthmus of Caucasus between the Caspian and the sea of Azof. In the seventh century they began to be famous, and till towards the middle of the ninth century their state was in an increasing and flourishing condition. About that time the empire of the Khazares extended from the Volga and the Caspian, across the caucasian isthmus, the peninsula of the Krimea, and what is now the south of Russia, as far as to Moldavia and Valakhia; and several flavonian tribes, particularly the Polianes about Kief and on the Dniepr, the Severans on the rivers Desna, Sem, and Sula, the Viatitsches on the Oka, and the Radimitsches on the Sosha, were tributary to them. But after the year 862 three nations wrought their downfall: the Russians, the Petschenegrans, and the Uzes. The varagian or russian leaders, Oskold and Dir, ravished from them the dominion over the Polianes; Oleg, in 884, reduced the Severans and the Radimitsches to his authority. His successor,

in 964, conquered the territory of the Viatitsches and the nine khazarian countries on the isthmus of Caucasus. The Khazares lost the remainder of their dominion about 1016 to the combined forces of the Russians and east Romans. The nation, indeed, continued for some time longer, but they were submissive and tributary to the Russians.

The PETSCHENEGRANS, as they are called in the russian and polish year-books, name themselves Kangar or Kangli, and were a powerful nomadic nation, which we can trace back to a homestead on the rivers Volga and Ural. They became first known in Europe by their incursion into the Khazarian empire in 839, and by their wars in 867 with the Slavonians, but shortly before made tributary to the Khazares. Driven from their seats by the Uzes and Khazares, they made themselves masters of the country between the Don and the Dniestr, and thence expelled the Hungarians subject to the Khazares. In the eleventh century they broke up and migrated towards Moravia, Bulgaria, and Thrace, and established themselves, after committing frequent ravages in the countries of the east Romans, in Dardania and the lesser Scythia. At the close of the twelfth century they possessed a part of Transylvania; but about that time they gradually vanish out of history.

The UZES, called also Kumanians or Polovtzes, appear already in Herodotus and Strabo. About the time when they first make their entrance in history

history as an active nation [883], that is, when, in conjunction with the Khazares, they drove the Petschenegrans from their homesteads, they had already extended themselves from Kharezm and the mountains of Kitzig-Tag, as far as the nether Volga. They now took the countries of the expelled Petschenegrans into possession, and one of their stems made themselves masters of the original abodes of the Khazares, on the western side of the Volga and the Caspian as far as Derbent. In the eleventh century they even spread into the eastern parts of Europe. They ravished from the Petschenegrans almost all that they had hitherto possessed in that quarter of the globe, particularly the Krim, the countries between the Don and the Dniepr, with Moldavia and Valakhia. After they had continued their ravages for a long time in Bulgaria, Thrace, Transylvania, and Hungary, and were in a great measure brought to ruin, they at last settled in Hungary. Towards the end of the eleventh century, they captured the north-eastern part of the Kuban from the Russians, who were at that time torn to pieces by intestine dissensions. In the former half of the thirteenth century they lost by the Tschinghises, Moldavia, Valakhia, and the Krim. In the year 1330 the Kumanians were numbered among the nations tributary to the state of Hungary; but from that time they cease to be an historical nation.

Befide

Beside the foregoing and several other turkish tribes that raised themselves to be independent or dominant nations, there were many separate branches of the same stem, the transactions and circumstances whereof, though not unknown, are not subjects for universal history, and of whom, therefore, little more is stated than the bare names. To this remark the Tartars are an exception, who indeed did not attain to any historical memorial till their subjugation by the Mongoles, yet whose earlier destinies, on account of the importance and extensiveness of that nation, excited some interest in the succeeding times.

Abu'l Gafi Bahatur khan *, who has given a copious, though not a complete, list of the turkish stems, mentions among them the tartarian as one of the most antient and famous, and derives its origin from a khan of the name Tatar. This stem, which in process of time increased to seventy thou-

* This historian was prince of Kharezm, and died in the year 1663. His son and successor Anusha Mahmed khan completed the work of Abulgafi, which bears the title of "A genealogical history of the Turks," and has been translated into russ, german, french, and english. The imperial academy of sciences at St. Petersburg is in possession of two good manuscripts of the tartarian original, and a written translation in german consisting of two folio volumes made more than forty years ago by professor Kehr immediately from the tartarian. He entitles this work: "A faithful translation from the tartarian original text of the Ghivischian ruler Abu'l Gafi Bahatur khan's Mongole-tartarian-turkish family-register and chronicle."

land families, was at first governed by its own commander, and afterwards divided into various branches, and spread into several and very distant regions, whereby their power was in some degree weakened. The most considerable branch settled on the borders of Kitay [China,] and fell under the sovereignty of that empire, against which it frequently rebelled, and thereby gave occasion to ruinous wars. At the time of Tschinghis some Tartars dwelt on the Onon or Amoor, who were tributary to the emperor of Kin, reigning in Kitay. Even Yessukai, the father of Tschinghis, had waged bloody wars with one of the tartarian race.

The Tartars only began to acquire some consequence in history at the time of their subjugation by the Mongoles. The very first enterprize of the great Tschinghis was against this people; and it is certain that this conqueror, ere he ravaged China with his armies, had already reduced all the tartar hordes to his authority, and was in quiet possession of their dominion, so that on his expedition against the Niudsches he had no obstacle to fear on this side. But, from the moment that the history of the Tartars excites attention, it ceases to be the history of a peculiar nation. Distributed under the banners and commanders of the Mongoles, these enjoy with posterity the glory of their victories and conquests, while, by a surprising caprice of fortune, the Tartars are obliged to lend their name to the devastations with which both nations everywhere

where marked the bloody progress of their armies. The subsequent events of this people have in part been already noticed under the last head of the historical sketch of the Mongoles, and the rest will be mentioned when we come to the account of the particular tartarian nations.

One consequence of the tartarian subjugation was, that the name of this nation which hitherto, out of China and the Mongoley, had been unknown to the rest of the world, began now to spread itself in the western Asia and in Europe, and presently caused a complete interchange of victor and vanquished. In the later military expeditions of Tschinghis, the Tartars were by far the most numerous part of his army, as we are justified in concluding from the single circumstance, that in all the conquered countries which before had had their proper language, not the mongolian but the tartarian became the predominant tongue; as, in the lesser and the greater Bukharia, among the Bashkirs and Tschuvasches, in the Krim and in the Kuban, &c. — Nothing was therefore more natural, than that the incomparably greater number of the Tartars expunged the mongolian names in all the western countries: besides, wars undertaken in conjunction, a community of habitation, and one common ruler, were favourable to the commixture of the two nations, the vestiges whereof, however, upon the demolition of the mongolian monarchy, are so much effaced, that at present, excepting in a distant similarity

city of speech *, the slightest relationship is no longer visible, even the lineaments of the face, and in their political constitution, (that of the Tartars partaking more of the democratical, as that of the Mongoles does of the monarchical,) the two nations discover a difference extremely characteristic, which is only less striking in particular races; for instance, in the Kusnetski-tartars, the Yakutes, and some others.

On the death of Tschinghis-khan, to maintain and people the conquered countries numerous colonizings were necessary, by which an almost general transplantation and migration of mongole and tartar stems ensued. This was the common policy of the successors of Tschinghis, who withdrew with their hordes to the countries which had fallen to their share from the great mass of his conquests †. We

* The tartarian language has mongolian words, which are not to be found in the turkish. The reason of this is probably because the soldiers of the mongolian army, being all unmarried, the race became extinct, and the offspring they had by the tartarian women in the conquered countries rather caught the language of their mothers than the more difficult dialect of their fathers, whence it happened, that in these countries, only a slight knowledge of the latter remained, which was afterwards ever more and more getting into disuse, till at last only a few words of the language of the original country were left remaining.

† The Usbeks, for example, or the Tartars, as they are called, in the great Bukharia and in Khorasm, consist, according to Abulgasi, of four main stocks, of which the Naimanes and Igures are known from the history of Tschinghis. But these two hordes formerly dwelt, the former on the western side of the native territories of Tschinghis, and the latter in Turfan.

are

are not therefore to be surpris'd at finding tartarian tribes and races beyond the boundaries of their country, and sometimes in very distant regions: the Naimans, for example, are entirely vanished, at least, excepting their name, from their original home; but they appear again in the west among the Usbeks, and in the east about the river Sira, above the province Lea-tong. A similiar fate has befallen the generality of the stems, as we shall see when we come to treat of the Siberian Tartars.

The final catastrophe of the great mongole-tartarian monarchy, and the subjugation of the several countries into which that monstrous state divided, as to their most remarkable particulars, have been already noticed under the foregoing head. As we there gave some account of the present state of the mongole nation, we will here cast an eye upon the existing constitution of the Tartars in general, and then proceed to lay before the reader the state of the particular stems that now belong to the Russian empire.

Not only subjugated in their conquered countries, but even forced from a great part of their old homestead, only some few of the hordes, in reference to the whole tartarian nation, have preserved their independence; those, namely, who inhabit the southwestern part of the former great Tartary, towards the Persian, Indian, and Soongarian borders. Here we find the great Kirghisian-horde, the Bukharians, the Khivans or Khivinses, the Karakalpaks, Truchmenes,

menes, Taschkentians, Turkoostans, Aralians, and some other races, which still form distinct states, and retain a sort of national liberty, but are all together so little formidable to their neighbours, that they seek protection wherever they are most likely to find it, according to their political situation, sometimes from one power, and sometimes from another. The whole remains of this nation, once so great, now subsist under foreign sovereignty. Many hordes belong, either as subjects, or as dependent wards of the russian empire; others are in like manner appanages to the ottoman Turks, or subject to the great Mogul, to China, and to Persia.

The Tartars belonging to the russian empire inhabit the northern coasts of the Euxine and the Caspian, the north side of the caucasean mountains, the extensive steppes from the river Ural to the Soongarèy, the southern Ural, in Siberia the southern frontier mountains and steppes from the Tobol quite over the Yenissey, and the deserts in the middle region of the Lena; likewise not a few tartar colonies are dispersed among the russian habitations, particularly in the governments of Ufa, Kazan, and Tobolsk.

As these regions have for the most part, since the flourishing epocha of the mongole-tartarian monarchy been inhabited by them, frequent memorials are found there of their antient grandeur, magnificence, and culture, of which some are of an antiquity

antiquity demonstrably of above a thousand years. It is no rare thing to come suddenly upon the ruins of some town, which, in its crumbling remains, plainly evinces the progress which the arts had made among a people whom we are wont to consider as barbarians*. Still more frequently are seen sepulchres, which, by their inscriptions, throw light upon the history of this nation; and, in the vessels and implements preserved in them, supply us with interesting proofs of its opulence, its taste, and its industry†. — These matters properly be-

* Near Kasimof, on the Oka, a circle-town of the government of Riazan, is standing a tartarian suburb, which seems formerly to have been the court-residence of a khan. Among the ruins is a lofty round tower, an oratory or chapel, the remains of a palace and a mausoleum, all constructed of brick or burnt tiles. Not far from Astrakhan are the ruins of the old Astrakhan; and higher up the Volga, near Tzaritzin, similar heaps of rubbish which have evidently been a spacious town. On the Volga, below the mouth of the Kama, are found well-preserved and partly magnificent remains of the antient Brachtimof, or Bolgar. In the citadel of Kazan are still seen monuments of the tartarian monarchy. On the Irtysh, in the vicinity of Tobolsk, are the remains of Sibir, the capital. In Siberia and the kirghisian steppe are many ruins of towns, not to mention memorials of inferior consequence.

† In the museum of the imperial academy of sciences at St. Petersburg, are preserved a multitude of vessels, diadems, weapons, military trophies, ornaments of dress, coins, &c. which have been found in the tartarian tombs on the Volga and in Siberia. They are of gold, silver, and copper. The greatest antiquity of the tombs is eleven hundred years, the latest four hundred.

longing to the history of civilization, which will be found in other parts of this work, we shall here be the less circumstantial, and only farther remark, that the Tartars, next to the principal nation *, constitute the most numerous part of the inhabitants of the Russian empire. The branches of this nation which belong to Russia are, the proper Tartars, the Nogayans, the Meschtscheryaks, the Baschkirs, the Kirghises, the Bukharians, the Yakutes, and the Teleutes ; to which may in some sort be added the tribes of Caucasus.

1. By the term PROPER TARTARS are understood in Russia all those stocks, which call themselves by no other name, and are for the most part descendants of the inhabitants of those two great states, which the successors of Tschingis erected on the Volga and in Siberia. We will, therefore, in the account of their present condition, follow this division, first making ourselves acquainted with the KAPTSCHAK, and afterwards with the SIBERIAN TARTARS.

The state of Kapttschak, which Baaty, the kinsman of the great Tschinghis, had founded, fell, as we have above related, in the year 1441, into four khanates : Kazan, Astrakhan, Kapttschak, and the Krim. The first three were, somewhat more than a hundred years afterwards, conquered by the Russians ; but the fourth of these states preserved its

* Not long since it was so. At present probably the Poles are more numerous than the Tartars.

independency above two hundred and thirty years longer. At present they all together form a part of the russian empire.

The khanate of Kaptſchak, which, from the time of its separation in 1441, has had its principal seat in the plain which is now called the astrakhan-steppe, came the earliest to its downfall. So long ago as the year 1506 it lost its last khan, and was divided among the sovereigns of Kazan, Astrakhan, and the Krim, on which at length it came to Russia by the conquest of the two former states. These repeated subjugations had reduced the kaptſchak Tartars to an insignificant residue, which now, removed from its antient homestead, dwells among Baschkirs and Kirghises, though still retaining its appellation and the memory of its origin.

The khanate of Kazan subsisted as a peculiar state till the year 1552, when it was conquered by czar Ivan II. and incorporated for ever with the russian empire. The city of Kazan had been built in the year 1257, by a son of Baaty; this khanate asserted its independency about the same time [1441] when the Krim disjoined itself from Kaptſchak. — The present kazan Tartars are but a feeble remnant of what they were, partly consisting of those who remained in their old seats, and partly such as settled as fugitives in other districts of Russia. They principally dwell at present in the governments of Kazan, Simbirsk, Riasan, Viatka, Perme, and Ufa (particularly in the orenburg district of that government);

ment); their number is indeed upon the whole considerable, but in no degree proportionate to the idea we form of their antient population, from historical accounts; for, as far as we are able to conclude from particular statements, they cannot amount to far above a hundred thousand. These Tartars form the root of the nation in Russia; they being not only unmingled, but are also of a superior civilization to most of the remaining branches of their brethren.

The khanate of Astrakhan arose soon after that of Kazan, likewise from a detached part of Kaptshak, and, in the year 1554, fell into the hands of the victorious Ivan. The present city of Astrakhan, however, is not the tartarian chief seat, which was conquered and destroyed by that tzar: the ruins of the latter being still to be seen somewhat higher up on the western bank of the Volga.—The present ASTRAKHAN TARTARS are for the most part Nogayans. They are distinguished into town, village, and tent Tartars. The first dwell in Astrakhan, the second in six villages near astrakhan, and the tent-Tartars wander about the Caspian. At the conquest of Astrakhan, the town and village Tartars reckoned themselves at twenty-five thousand bows; in the year 1715 there were still twelve thousand of them; but in 1772 they were only twelve hundred, and of the tent-Tartars scarcely two thousand kettles or families. This decline proceeds from their rambling disposition, so often moving them to change
GG 2 their

their homestead: they went off singly and in companies, to the caucasean and krimean Tartars, to the Baschkirs and even to the Kirghises.

The khanate of the Krim, which, as far down as to the year 1783, still constituted a peculiar state, now also belongs to the russian empire. As the history of the peninsula of the Krimea commences long before the origin of the great kaptschakian empire, and the fortunes of that country excited an interest even in the polished nations of antiquity, it cannot well be considered as a useless deviation from our plan, if we devote a few lines to the earlier state of this province, previous to the possession of it by the Tartars.

The first known inhabitants of the Krim were Kimmerians, a great and martial people of the race of the Thracians. Of all their extensive possessions, which were ravished from them by the Skythians, they retained the Krim the longest. Six hundred and fifty-five years before the christian æra, they were, it seems, driven from the plain by these their stronger neighbours; but they maintained their station in the mountains, under the name of Taurians, or mountaineers. From them the whole peninsula obtained the appellation Taurica (Tavrika). In the former half of the sixth century Greeks began to settle here. The Milesians built Panti-kapæum or Bosphorus*, and Theodosia†; the

* In the tartarian, Kertsch; in rufs, Vosfor.

† In tartarian, Keffa; rufs, Feodosia.

pontic Heraclians and the Delians, Kherfon. The commerce which the Greeks from that time forward here carried on was uncommonly flourishing, and contributed not a little to enlarge their geography.

In the fifth century, the Archæanaktides, a race which originated from Mytilene, founded a monarchy in Bosphorus. About a hundred years afterwards, the Skythians were for the most part exterminated by the Sarmates; upon which, by insensible degrees, the Taurians extended their dominion over nearly the whole peninsula. They pressed so hard upon the empire of Bosphorus and the free state of Kherfon, that these submitted themselves to the great Mithridates of Pontus in 112, who also subjugated the Taurians, and consequently governed the whole Krimea.

About the beginning of the christian æra, the Alanes penetrated into the peninsula, forced the bosporian kings to pay them tribute, and exterminated the Taurians. — The sovereignty of the Alanes lasted about a hundred and fifty years, and in their place came the Goths. During the period of their possession, (in the time of Dioclesian and Constantine the great,) christianity was disseminated in the Krimea. These Goths were indeed subjected to the Huns, in 375, but they retained their habitations in the mountains, and had their own christian kings. Towards the close of the fourth century the empire of Bosphorus also came to an end.

On the downfall of the sovereignty of the Huns, in 464, the Ungres came hither; who, with the

Bulgarians, conquered also the countries between the Don and the Dniestr. A part of them went back again to Asia, and the rest were obliged to submit [679] to the Khazares*, who likewise compelled the Goths in the mountains and the grecian cities to be tributary to them. In the year 840 the province of Kherfon was marked out by the emperor Theophilus, which comprised all the grecian cities and places in the Krim and the Kuban; for though these were equally tributary to the Khazares, they however acknowledged the supremacy of the byzantine court.

The Ungres and Khazares were again [882] subdued by the Petschenegers or Kanglians; who, about the middle of the eleventh century, were forced in their turn to resign the dominion to the Komanes (Uzes or Polovtzes). This people also extorted a tribute from the krimian Greeks and Goths. — About this time the city Sugdaya (now Sudak) rose into such consideration by its commerce, that all the grecian possessions in the Krim received the name of Sugdania. Till the year 1204 these had always acknowledged the sovereignty of Byzantium; they were now independent.

To the Komanes at length succeeded the Mongoles or Tartars in the sovereignty of this peninsula; and thenceforward [1237] the Krim formed a province of the kaptshakian empire. Now detached

* From that time the peninsula was called Khazaria.

tartarian princes, to whom the name of Ulutz-beys were given, roamed about the plain with their hordes. The Greeks and Goths paid tribute to the Mongoles, as they had before done to the Komanes; also several Tscherkassians settled here. From the city of Krim, to which the Mongoles carried on a great trade, the whole peninsula obtained the name by which it was usually called till the year 1783.

While the Latins were masters of Constantinople, they, especially the Venetians, prosecuted a very important commerce to the Krim and to Taman (Matriga); but in later times the Genoese appropriated it exclusively to themselves, and in the bloody wars that broke out in consequence, they gained the superiority at various times. By permission of the Mongoles, they rebuilt Keffa, and made that city the centre of their commerce: they conquered Soldaya (Sudak) and Cembalo (Baluklava;) they paid indeed duties and imposts to the Mongoles, when they were in full force, but when the hordes were disturbed by intestine commotions, they even bid them defiance, and the princes of the k Crimean plains were ordinarily elected and deposed at the discretion of the Genoese. About this time two branches of the indian commerce found their way to these regions: the one over the Amoor, the Caspian, and through Astrakhan to Tana; the other by the way of Bagdat and Tauris, to Trebizond and Sevastopolis. Tana was possessed at the same time by the Genoese and the Venetians, but under mongolian sovereignty.

On the fall of the state of Kaptschak, the Krim was formed into a peculiar khanate, the founder whereof was Hadschy-Gheray, about 1441. From that period the Tartars dated their dominion, though the khans were still descendants from the house of Tschinghis-khan. The proper founder of the tartar-krimean state, Mengly-Gheray, who, in the fifteenth century, through the assistance of the Ottomans, had come to the complete sovereignty of the * peninsula, submitted himself as a vassal to the porte, which soon

* Mengly-Gheray was a descendant of the Tschinghises; and, while yet very young, was taken prisoner in an engagement by the Genoese, who caused him to be well-educated, and in all respects treated like a prince. On being driven to extremities by the Tartars, they sent the young Mengly, with some of the principal Genoese, to Constantinople, for the purpose of moving Mohammed II. to take them under his protection. The sultan shewed great affection to Mengly; and, when the tartars by their dissensions had ruined the interior commerce of the country, they petitioned Mohammed to give them a khan of their own; he appointed this young prince to that station, who, on his part, acknowledged the paramount supremacy of the porte. This state of dependence not proving agreeable to the Tartars, Mengly, not long after his arrival in the Krim, was obliged to apply for auxiliary troops of the Turks, with which he not only [1475] reduced the Tartars to obedience, but even annihilated the genoise authority in the peninsula. But when Mengly had augmented the forces of his state by these conquests and by the addition of many tartarian colonies, and was thinking to withdraw himself from the supremacy of the porte, the Turks sent garrisons into the principal towns, and reduced the khan to a dependence, which afterwards, and particularly from the year 1584, grew into a complete subjection.

arrogated

arrogated the right of imposing sea-tolls on their trade, to keep forts in their country, and at length even to set up and to depose their khans at pleasure. Under this austere despotism the Krim subsisted till the year 1774, when Catharine II. by the peace of Kutschuk Kainardgi, procured the independence of the khan, and obtained for the russian empire some strong-places on the frontiers, as a safeguard against the predatory incursions of the Tartars. A few years afterwards [1783] the whole peninsula, as is well-known, came to Russia; and, at present, together with the eastern Nogay, or the krimian steppe, forms a government, under the name of the Tauridan province.

The Krim had but few tartar inhabitants, when Mengly-Gheray was the ruler of it. On occasion of the war which he carried on with his relative branches on the Volga, he brought many thousand Nogays with him to the Krim, whom he obliged to settle there. The great population of this peninsula, to which belong Armenians, Greeks, Turks, Jews, &c. besides Tartars, had already much declined, during the troubles, under the last khan. The Armenians and Greeks submitted themselves [1779] for the most part voluntarily to the russian empire, and retired to the former government of Azof, or what at present is that of Ekatarinoflaf; and the Tartars fled in such great numbers to Avchasia and to the Ottomans, that credible eye-witnesses think they cannot rate the population of the Krim in the year 1782 higher than at fifty thousand men.

We

We now proceed to the SIBERIAN TARTARS, who form, as it were, the second line of the proper Tartars in Russia. Siberia contains so great a multitude of tartarian colonies, and many of them appear to have been so long naturalized in the country, that, from the perplexity and the contradictions that prevail in the accounts of them, we are not capable of tracing out a general and connected history of these tribes. We will, therefore, take under this head the events of the mongole-tartarian state in Siberia, and lay them as a ground-work; after which we will endeavour to arrange by this clue such historical fragments as may serve to throw a light on several distinct nations.

The mongole-tartarian state in Siberia, or the khanate of Turan, was, as has already been cursorily mentioned, founded about the middle of the thirteenth century by Scheibany, a brother, or kinsman, of Baaty, and took its origin in the region of the Aral-mountains and on the river Yaik (now Ural), where this khan had inherited possessions from Baaty, which he presently enlarged by conquests in Siberia to a very considerable territory. The first residence of the tartar-siberian princes was on the river Tura, on the spot where the present Tiumen stands *, and was called, in honour of the

* Tiumen is a circle-town in the tobolskoi district of the government of Tobolsk, two hundred and fifty-four versts from that chief city. The Tartars at Tiumen still call this town Tschinghis, or Tschinghi-Tura.

grand-khan, Tschinghidin: afterwards this city was razed, and the khans took their seat, perhaps for fear of the attacks of the Kazanians, on the eastern shore of the Irtysh, where they built the city Isker, which afterwards got the name of Sibir, and lies in the vicinage of the present Tobolsk. The last khan of Turan, previous to the russian conquest of Siberia, was Kutschum, a Tschinghise of the kaptschak lineage, who went from the Kafatschia-Orda to Siberia, and subjected this state to him, either with the free will of the inhabitants, or by the right of the conqueror. This prince was the first who established the mohammedan religion in Siberia; for although that faith had found admission much earlier among the Tartars, yet there was a necessity for all the persuasives of enthusiasm, and even the coercion of arms, to render its adoption more general. The arrival of the Russians interrupted these conversions ere they could be rendered complete; and the remoter provinces of the khanate were still imbued with paganism.

The circuit of the empire, of which Kutschum was sovereign, cannot indeed be accurately stated; but certain it is, that the Tartars on the Irtysh and the Tobol and in the steppe Baraba, as well as the Ostiaks and Vogules in their neighbourhood, are become his subjects. The Tartars on the Tura and the Isset have, according to some accounts, formed a peculiar state independent of Kutschum, whose khan had his seat at Tiumen. — Of the
discovery

discovery and conquest of this country by the Russians, mention has already been made in several places of this section *, we shall therefore here pass it over in silence, and proceed at once to notice the several branches of which the Siberian Tartars of the present day consist.

Although the generality of these colonies came not till the thirteenth century, on the aggrandizement of the mongole-tartarian territory, yet there are also some stems which seem to have been long before that epocha in possession of several districts of Siberia. If we may judge from their oral traditions, they esteem themselves in some measure the original inhabitants of that country; but as there is a total failure of historical accounts on this head, and the generality of the tartarian stems have so much intermingled with the other Siberian nations, that their descent is scarcely to be ascertained, nothing remains for us to do but to follow the political distribution which is adopted in the records of the Russian chancery, which distinguish the Siberian Tartars into various stems according to the districts which they inhabit. As these now, both in their physical and moral individuality, differ greatly from each other, it will be necessary to mention the most remarkable of them by name.

Among these are the TURALINZES, one of the first colonies who constructed for themselves per-

* See the articles, Russians, Siberian-kozaks, and Mongoles.

manent habitations, when the Tartars subjugated Siberia in the thirteenth century ; thence also their name, (from Tura, in the tartar language, a town,) which signifies the same with settlers. Ever since their arrival they have inhabited the region on both sides of the river, which from them is denominated the Tura, between the Tavda and the Isset, in the ekatarinenburg and tobolskoi districts of the governments of Perme and Tobolsk. Their oldest fixed seat was the forementioned city Tschinghidin ; but when Yermak made the conquest of these parts, the khan Yepansa resided higher up the Tura in a city, which, after their restoration by the Russians, was named Turinsk, and bears this name at present, though it is also called by the Tartars Yepantschina.

The TOBOLSKIAN TARTARS have their appellation from the river Tobol, on which they dwell, and are the descendants of the inhabitants of Iker or Sibir, their antient capital, which being reduced to a heap of rubbish after Yermak's conquest, they abandoned, and instead of it the Russians afterwards built Tobolsk. They must not be confounded with the tartar inhabitants of Tobolsk, who are a bukharian colony, as we shall see farther on. Their number amounts to upwards of four thousand males.

The TOMSKIAN TARTARS dwell on both sides of the river Tom, above and below the city of Tomsk ; but in the town itself is a colony of Bukharians.

Bukharians. According to the census of 1760 they were only taxed at four hundred and thirty males. — The KRASNOVARSKIAN and KUSNETZKIAN TARTARS are remains of antient stems, who are everywhere much alike, and also bear a great resemblance to the mongolian tribes, which is easily explained from the close intercourse in which these races lived during their oppression by the Soongares. — The TARTARS OF THE OBY consist of sixteen volosts, of which twelve have permanent habitations on the Oby, and the others nomadise. In the year 1766 the former counted one thousand one hundred and fifteen, and the latter five hundred males. — The TSCHULYMSKIAN TARTARS dwelt formerly between the Oby and the Yenissey, but, constantly pressed by the Soongares and Kirghises, not always in the same district. Since they have enjoyed protection and repose under the russian sovereignty, they inhabit the whole region along the river Tschulym, and now amount to between five and six thousand bows. — The BARABINZES inhabit the country between the Oby and the Irtysh, which is called the Baraba, or the barabinzian steppe; and, as far as their tradition goes, they are the proper owners of it. At the conquest of Siberia by the Russians, they were under Kutschum-khan, and in the year 1595 came into subjection to Russia. Since that time they have been often plundered on the incursions of the Soongares and Kirghises, and even compelled by the former to pay them a yearly tribute;

tribute; but since the Siberian frontier-line has been established, they have enjoyed complete tranquillity. They are about five thousand bows in number. — The KATSCHINTZES, on the left shore of the Yenissey, are taxed at the rate of about a thousand bows, and have possessed their territory longer than the history of that country reaches. — The KISTIM and TULIBERT TARTARS, on the left bank of the Tom, form two volosts, and approach the Teleutes. — The BIRIUSSES, with the Katschintzes, come nearer to the proper Tartars, and consist of about a hundred and seventy bows. — The ABINTZES, in the superior region of the Tom, reckon themselves at some hundred bows, and likewise resemble the Teleutes. — The SAYANE TARTARS name themselves Scœycen, from the well known sayane mountains, in which they nomadise on the left shore of the Yenissey. They pay taxes for a hundred and fifty bows. — The BELTIRS wander with the Sayanes and Biriusses on the Abakan, and may be estimated at about a hundred and fifty bows. — The VERCHOTOMSKIAN TARTARS constitute a peculiar stem, which numbers only about two hundred bows. They nomadise about the sources of the Tom, and resemble the Abintzes. — Besides these there are yet several insignificant stems, as the MELESSIAN, the ARALIAN, the UDINSKIAN, the YARINSKIAN TARTARS, and others. The tribes before-mentioned are, however, in general much more numerous than we have here stated their population to be, as
the

the enumerations in these extensive deserts, and from their rambling way of life, are attended with great difficulties. All the regions we have noticed are in the governments of Tobolsk and Kolhyvan, and partly in the eastern half of that of Perme, beyond the Ural-mountains, which, therefore, are to be regarded as the peculiar home-seat of the Siberian Tartars.

2. We come now to the second main branch of the Tartars, the MANKATS or NOGAYANS. Of this great and numerous people we have no authentic and connected history. According to the arabic and grecian writers it owes its origin to a mongole chieftain, named Nogay, who, towards the termination of the thirteenth century, was sent with a strong body of troops by a khan of Kaptschak to conquer the countries lying beyond the Euxine, and who actually subjected the regions from the Don to the Danube, but afterwards shook off the sovereignty of the khans of Kaptschak, and became the founder of an empire, which, however, presently fell to pieces under his successors. Notwithstanding the annihilation of this state, the name of its founder continued to live in the nation which he had governed; and it is very probable that the Nogayans spread themselves from the Volga to the Ural, and thence again as far as the Irtysh *, and were not driven out of

* In the territory of the town of Ufa is still in being what is called the Nogay-road; and on the Irtysh is a region which bears the name of the Nogayan steppe.

these regions by the Kalmuks till the æra of the russian sovereignty. — They now inhabit the steppes on the north side of the caucasean mountains and the Euxine quite to the other side of the Danube, and consist of several larger and smaller stems, which at times are known to change their place of abode, and even their names. The Nogayans subject to Russia are partly in what was formerly called the eastern Nogay or the krimean steppe, partly in the Kuban, and partly dispersed about the Volga and in other regions of the empire.

The EASTERN NOGAY forms the northern larger half of the province of Taurida, denominated by the Russians the krimean steppe. It is about twice as large as the peninsula of the Krim, and was formerly much larger; but in the year 1739, by the peace of Belgrade, more than the half of it came under the russian sceptre, which part belongs at present to the government of Ekatarinoslaf. The remainder, which likewise had formed a part of the states of the krimean khans, fell to Russia on her taking possession of the Krim in 1783; and this now constitutes the circles Melitopol and Dneprovsk in the province of Taurida.

The eastern Nogay has had almost always the same fortunes and been inhabited from the same people with the Krim. Kimmerians, Skythians, Sarmates, Alanes, Goths, Huns, Ungres, and Bulgarians, Petschenegrans, Komanes, and lastly the Tartars, have successively inhabited this country.

At length those Tartars who are called Nogayans settled here, and still at this moment form a considerable part of its population. — Till the year 1770 the stems of Yedischkul, Dshembuluk, and Kurgoes resided here. The horde Dshembuluk had formerly their abode on the Dshem (the river Yemba) in the kirghisian steppe, where they were subjugated by a khan of the Torgots. Still at the commencement of the eighteenth century free Nogayans wandered in this region; the famous kalmuk khan Ayuka drove them, however, farther westward across the river Ural and the Volga, upon which Peter the great conveyed them to their kindred-races on the rivers Kuma and Kuban, excepting the chundurovian-nogayan horde, whom he declared to be subjects of the Kalmuks, and sent them to them. During the troubles that arose upon khan Ayuka's death among the Kalmuks, the Nogayans in their neighbourhood suffered so much, that the hordes Dshembuluk and Yedisan thought it expedient to withdraw in 1715, to the number of more than ten thousand families, to the Kuban, and to put themselves under the protection of the porte. Hence the greater part of them were transplanted into the eastern Nogay, whither, a few years after, they were followed by the rest of the hordes. During the war before the last between Russia and the Porte, in 1770, the two hordes betook themselves to the Kuban, under the russian sovereignty, which example the Yedischkul and Akermenian or Belgo-rodian

rodian horde soon followed. By the peace of Kutschuk-Kainardgi they were all made over to the krimean khan, and on the taking possession of his states in the year 1783 they came back again to the russian empire.

The second and at present the only main-seat of the Nogayans is the Kuban. This country too has experienced various and remarkable circumstances. As far back as we can with any certainty recur to history, there dwelt along the coasts of the sea of Azof, from the Don to the northernmost exit of the river Kuban, a nation, or rather a mixture of people, which were wont to be comprised under the name of Sarmates; at the other mouths of the Kuban, and about the Euxine, dwelt nations of kimmerian or thracian descent. These coasts were very early visited by Phœnicians and Kavians, afterwards even by the Greeks. In the former half of the sixth century before the christian æra, Ionians and Æolians settled at the mouths of the Don and the Kuban, and there built trading towns and cities, which in a short time flourished and became wealthy. The towns on the Kuban fell at the same time with Pantikapæum, under the dominion of the Archæanaktides; two-and-forty years afterwards Spartacus became their ruler; and under his successors the bosporian kings, they lived till the time of the great Mithridates.

After the Sarmates were for the most part gone to Europe, five years before Alexander, we find the

Yazamates as the inhabitants of this entire tract of country. After them appear other nations, from those swarms of people who were called Alanes, and of whom remains are still preserved in the Tscherkessians, the Chechians, and Avchases. — About the year 112 before the birth of Christ, the grecian cities fell under the power of the great Mithridates; and some of his successors were so puissant, that they reduced all the inferior stems, about the coasts of the sea of Azof as far as to the Don, to their obedience. On the incursion of the Huns, in 375, many of the Alanes were driven to Europe, the possessions of those who remained behind contracted, and the bosporian empire demolished. Ninety years afterwards came the Ungres and Bulgares in the place of the Huns; they proceeded to conquer the Krim and all the country between the Don and the Dniestr. In the year 679, however, the Chazares subjugated all the nations of the coasts, from the roads of Keffa as far as the Don, and extended their conquests into Europe. The empire which they here founded lasted 336 years, and was for a long time the mightiest and most flourishing state in these eastern regions. By the inroads of the Petschenegrans, and the flight of the Ungres [882], the Chazares lost all their european possessions: they retained nothing but the country between the Kuban and the Don, and the tract on the southern and eastern shore of the last-mentioned river. This latter region was ravished from

from them [965] by the Russians combined with the byzantine Greeks, who made themselves masters of the countries bordering on the sea of Azof [1015], completely overturned the chazarian state, and erected a distinct principality on the isle of Taman, to which both the Chazares and the Ziches [russ, Yasy] were for a long time tributary*.

It appears, that towards the end of the eleventh century, while Russia was torn by intestine broils, the principality of Taman was lost to that empire. The Komanes or Polovtzes took possession of the north-eastern part of the Kuban, as did the Ziches and other tscherkessian stems of the southern and western districts. At length [1221] the Mongoles made their first attack. The Komanes were either massacred, or expelled, or subdued by these perpetual disturbers of the world: but the Ziches fought bravely for their liberty, and could not be made to submit till the year 1277, when they were overpowered by Mangu-Timur-khan and the famous Nogay.

* This is the famous principality of Tmutarakan, mentioned by the russian annalists from the latter half of the tenth century to the year 1127, and concerning the situation whereof so many and such various conjectures have been formed. This matter is now reduced to certainty by the inscription on a marble discovered a few years since, that this principality was on the island of Taman, and the capital of it stood on the spot where the antient Phanagoria stood. See the privy-counsellor Muffin-Puschkin's historical disquisition on the situation of the old russian principality of Tmutarakan in Storch's materials, &c. and at the end of the first volume of Tooke's history of Russia.

Nevertheless their submission was always very doubtful and conditional; and they remained, in fact, independent in their woody and mountainous regions. The Ottomans indeed [1484] conquered the cities and forts of Taman, Temryuk, and Atschuk [Atschuyef]; but they gained thereby no sovereignty over the Tscherkessians. A Sandschak-pasha, till the war of 1770 with Russia, was their viceroy in these towns, where they shared the moiety of the imposts with the khan of the Krimea. At the peace of 1774, the sultan of the Ottomans relinquished his possessions in these parts; but, contrary to treaty, held Taman and Temryuk in a state of siege, till the krimean khan, by the aid of the Russians, drove the ottoman garrisons out of them. By the treaty of the year 1783 Russia obtained, together with the Krimea and the eastern Nogay, also the northern part of the Kuban as far as the promontory of Caucasus, from which that tract of country with the whole government to which it belongs, has received its name.

At the commencement of the ottoman period the krimean khan had not as yet the sovereignty of the Kuban, the khan of Astrakhan exacting homage as the paramount lord of that district. Though, properly speaking, it was governed by petty tscherkessian princes, who were dependent on no one. Mohammed Gheray was the first krimean khan who attempted to enlarge his authority here; his successors prosecuted the war with the Tscherkessians, and

and were constantly gaining ground upon them. They transplanted hither numerous swarms of astrakhan Nogays, who had either been carried off by them in war, or who had voluntarily (especially at and after the demolition of the astrakhan state) quitted the Volga, and put themselves under the protection of the krimean khan.

The KUBANIAN NOGAYS, called also the little or black Nogays [Kara Nogay] are distributed into various hordes or stems, whereof the Kafay-aul and the Naurus-aul are the most remarkable, and together compose about ten thousand families. Besides these, here have been for a long time a part of the yedischkulian and the dshembulukian hordes; as also a stem which bears the name of Kiptschak. In the year 1770 came hither, as has been already mentioned, the hordes Budshak [Akkermen], Yedisfan, Yedischkul, and Dshembuluk, from the other side of the Don, and were still here in 1783, when the Russians took possession of the Kuban. The strength of these four stems is estimated at seventy-thousand bows, and from the testimony of an author, who made inquiries on the spot, the population of all the eastern and kubanian Nogays, a few years ago, amounted to upwards of five hundred thousand families: but this number is probably exaggerated.

Besides these, who are but lately come under the russian sovereignty, there are, in various parts of the empire, other remains and colonies of this na-

tion of Nogays. Among which are the ASTRAKHAN TARTARS, who, for the most part, compose the main stem of the present Nogays, and of whom we spoke more circumstantially above. — The CHUNDUROVIAN Nogays form a considerable horde, nomadising on the Achtuba, an arm of the Volga, and numbers about a thousand yurts. It has already been related in another place *, that a strong cohort of Nogays, who were about to spread across the river Ural, were made subject to Ayuka, khan of Torgot. Ayuka's successor, Donduk Ombo, reduced likewise several thousand tents of chundorovian Tartars under the dominion of the volgaic horde. When the Torgot in 1770 fled into the Soongarèy, the Chundurovians made themselves free, by securing themselves on the islands of the Volga under the fort of Krasnoyarsk. — Besides these, there are several bodies of Nogays dispersed among the other Tartars of the empire; accordingly the whole number of Nogays in subjection to the russian empire is very considerable.

3. The MESCHTSCHERIÆKS, who form an old distinct tartarian stem, were already known under that name to Nestor. In the fourteenth century they had their seat in the modern government of Nishney-Novgorod; they afterwards settled in the country of the Baschkirs, for which they were obliged to pay a ground-rent. On account of their

* See the article *Ælæt*, or Kalmuks.

fidelity during several rebellions of the Baschkirs, they were freed from this tax, and now dwell among the Baschkirs and Tartars in the orenburg district of the government of Ufa, where they amount to about two thousand families.

4. The BASCHKIRS call themselves Baschkurt, and derive their origin partly from the Nogayans, and partly from the Bulgarians. Probably they are Nogayans, whom the Bulgarians adopted among them : their country at least is a part of the antient Bulgaria. They formerly roamed about the southern Siberia under the conduct of their own princes ; to avoid the molestations of the siberian khans they settled in their present possessions, spread themselves about the rivers Volga and Ural, and were subject to the kazanian khanate. On the overthrow of that state by Ivan II. they voluntarily took refuge under the russian sceptre ; they afterwards however frequently revolted against the government, whereby their prosperity, as well as their population, have been considerably diminished. In the year 1770 they consisted of twenty-seven thousand families, having their homestead in the governments of Ufa and Perme.

5. The KIRGHISES, or Kirghis-Kaizaki, call themselves Sara-Kaizaki [steppe-kozaks,] and likewise Kirghises, probably from the founder of their horde. By their traditions they are originally Nogays ; Abulgasi affirms them to be descendants of the primitive Mongoles, who at first dwelt about the

the river Ikran in the vicinity of the chinese wall, and at the general migration and transplantation of the mongolian races, travelled into more western regions. But the antient history of this people is involved in the greater obscurity and doubt, as, till the russian conquest of Siberia, nothing was known of them in Europe. At the time of that conquest the Kirghises nomadised at the superior Yenissey, about the Yufs, the Abakkan, &c. and in the year 1606, they were subjected to the russian empire at the same time with the Barabinzes. From that period, by their pusillanimity, their faithlessness, their frequent rebellions, and by the subjugation of correlative nations, they have got the character of an extremely turbulent and dangerous people. The revolutions which have thereby been produced in their political condition, induced them to remove from the Yenissey to the Oby, and gradually farther to the west and the south. They at present inhabit the prodigious desert between the Ural and the Irtysh, denominated by the Russians the Kirghisian steppe, and bordering westward on the Caspian and the government of Caucasus, northwards on the parts about the Ufa and the Tobol, and eastwards on the government of Kolhyvan.

As long as the Kirghises have been known to other nations, they have always been divided into three hordes, the great, the middle, and the little hordes: the first, from its intrepidity and the protection afforded them by the inaccessible indian mountains,

tains, is still independent, notwithstanding the great efforts made by their southern neighbours the Soongarians, to subjugate them. The middle and the little hordes have acknowledged the russian sovereignty ever since the year 1731; but have always shewn themselves as unfaithful allies and a very piratical people; for which reason lines of small forts have been constructed along the frontier rivers. Each of these two hordes are estimated at thirty thousand kibitkies or families; but they are probably much stronger.

6. The TELEUTES or Telengutes, are thought to have their name from the lake Telengul in the Altay-mountains; they are denominated also by the russians the white Kalmuks, because they formerly lived among the Soongarians. Abulgasi reckons them among the mongolian races: as their speech however is manifestly a corrupt tartarian, their origin may more consistently be derived from that nation. In the year 1609 they did homage for the first time to the russian empire; but it was not till towards the middle of the seventeenth century when some stems of them removed higher up the Tom, that they became properly subjects of Russia: the greater part, however, remained with the Kalmuks. The former dwell partly in the tomskoi district of the tobolskian, partly in the kusnetskian circle of the government of Kolhyvan, and their number is so small, that they only reckon about five hundred males.

7. The

7. The YAKUTES, who denominate themselves Socha, must formerly have been one people with the Tartars, if we may judge from their language and bodily form. Their antient homestead extended from the Sayane-mountains as far as the Angara and the Lena. Persecuted by the Buræts and Mongoles, they removed down the Lena to their present rude and inclement districts, where they are found in the government of Irkutsk on both sides of that river quite to the Frozen-ocean. In the year 1620 they submitted to the russian conquerors, and at the middle of the present century they numbered upwards of forty thousand bows; but since that time they are considerably increased.

8. In addition to all the tartarian nations we have hitherto mentioned, there are still considerable colonies formed of tartarian tribes in various parts of the russian empire. The unbounded religious toleration, the powerful protection and the prudent policy of the russian government, have long rendered that country a refuge not only for such as are fond of change, but to all in general of the injured and oppressed among the neighbouring nations. The tartar nations, like all the orientals, being more governed by a roaming disposition, than the Europeans, frequently exposed to ill-usage from the caprice of their arbitrary lords and the inroads of their neighbours, find in Russia not only all the benefits of civil society in a far higher degree, but also numerous settlements of their collateral races
domesticated

domesticated there, with whom they are intimately connected by language, manners, and religion. All these motives in conjunction are so alluring to the surrounding tartarian nations, that the numbers of them who migrate annually to Russia may be considered as a considerable source of population. Besides the single arrivals which take place with all the tartar stems in the empire, and which incorporate themselves with them, and therefore lose their distinctions among them, there are, particularly in Siberia and in the governments of Ufa, Kazan, and Caucasus, whole colonies, more or less considerable, of these fugitives, who, like the Terpteres mentioned among the finnish races, in some sort form new stems. Thus, for example, the fort Nagaibak, on the Ik, (a river of the Kama,) and many frontier places of Siberia, Orenburg, and Astrakhan, contain such mingled bodies of tartars. — Of the nogaik hordes, even before their entire subjection, considerable stems settled singly among the Tartars of Kazan, Ufa, and Orenburg, but especially among the Baschkirs. — In Astrakhan, Kitzliar, Mosdok, and in general about the Terek, are numerous bodies of the caucasian nations, particularly of such as are not under the russian protection. As we shall speak of these in the sequel, we pass them by at present, in order to cast an eye upon the still independent tartar tribes, of whom considerable colonies are found in the russian empire. To these principally belong the Bukharians, Chivayans, Taschkentians, Turkostans, Aralians, Truchmenians, and Karakalpaks.

The

The LESSER BUKHARIA lies, as every one knows, contiguous to the Caspian and the lake Aral in the east, and is surrounded by Persia, the northern India, and several petty tartarian states. The capital Bukhara is by the strait road scarce thirty days journey (about fifteen hundred versts) from Orenburg. — The Bukharians affirm themselves to be unmixed descendants of the Uzes and the modern Turkomans, who settled here at the time of the military campaigns in the west. Their form of government is monarchical; but the khan is elected from the princely family, his power is limited, and he may be deposed from his dignity, though this case seldom happens.

The russian empire has from time immemorial possessed very considerable COLONIES OF BUKHARIANS in Siberia. The tartarian suburbs or slobodes at Tobolsk, Tara, and Tomsk, are entirely, and those of Turinsk and Tiumen for the most part, inhabited by Bukharians; there are also many of them in the neighbourhood of those cities, where they live either in particular villages or among the Tartars. In the Baschkirèy are two Bukharian volosts; and, besides them a multitude of smaller settlements in the government of Ufa, in Astrakhan, and other places. All these colonies taken in the aggregate compose greatly above twenty thousand males. The civil establishments have mostly arisen from the trading caravans, and still continue to receive some augmentation by the merchants who stay behind.

The Bukharians in the villages, and those dispersed among the Tartars, are almost all fugitives who have escaped from kirghisian bondage.

The CHIVAYANS or Chivinfes, who are likewise called Charafians, dwelt some time ago about the lower parts of the river Ural. Their present country lies on the east side of the lake Aral, and borders on Persia, the lesser Bukharia, and other tartarian states. The distance of their capital, Chiva, from Orenburg, is computed at only twelve or fifteen days journey (six or seven hundred versts). Their political constitution is similar to that of the Bukharians.

— TURKOSTAN, or Turkestan, has long ceased to be the most flourishing and powerful state of these regions. It consists solely at present of the moderate town of that name, which was lately subjected to the middle kirghisian horde. — TASCHKENT is a somewhat larger state, and has a khan of its own, who, as with the Chivayans, is elected from the kirghisian princely races, and sometimes acknowledges the patronage of the Kirghises, and sometimes the sovereignty of the Soongarians. Both nations are only distinguished from the Bukharians and Chivinfes by their greater poverty. The colonies, in the russian empire, of these three tribes, are attached either to the Bukharians or to the other tartars; their number is by no means great, and they have settled here either as merchants or as escaped kirghisian captives.

The ARALIANS inhabit the coasts and islands of the lake Aral. They are an Usbekian race, choosing
its

its independent khans out of the kirghisian princely family, and not stronger than about five thousand bows. They live not in towns, but, however, in permanent villages, and are in all respects very like the Chivinses. They have no opportunity for trade; therefore they come to Russia on no other occasions than when any of them are happy enough to escape from the kirghisian slavery. In such cases they settle in the first tartarian colony they come to.

The parent-stock of the TRUCHMENIANS, or the ancient Turkomans, who are called by the Russians terekmenian tartars, still nomadise on the eastern coasts of the Caspian, where their territory extends as far as the lake Aral and Persia. The Truchmenians, of whom we are now to speak, possess on the western side of the Caspian that part of the caucasean mountains which stretches from that sea as far as the province Kakhetty of the georgian state. The generality of the districts have their own common princes; others form particular states, and some are under foreign sovereignty.

In the former half of the eighteenth century a part of these hordes fell under the yoke of the torgotan prince Ayuka, and on that occasion many truchmenian families withdrew to the Tartars of Orenburg, Ufa, and Astrakhan. In the year 1770, when the before-mentioned flight of the Kalmuks ensued, the remainder of these people, who had till then been under the dominion of the Kalmuks, set themselves at liberty, and at present nomadise

free subjects of the russian empire, about the mouth of the Kuma. Their number is continually increasing by new comers, who escape from the Kirghises, and are found though singly among the Tartars of Orenburg and Ufa, yet to no small amount.

The KARAKALPAKS, lastly, call themselves Kara-Kiptschak, and inhabit the districts on the Syr Darya, a considerable river springing from the lake Aral. They divide themselves, according to their position, into the upper and the nether horde. — Previous to the origin of the kazanian khanate they removed to the Volga; where, pressed by the Nogays, they marched like the Chivinses, not as other nations did, to the west, but back towards the east, into their present seats. About the year 1742 the nether horde, then consisting of thirty-thousand kubitkas, implored the russian protection; but the Kirghises, against whom they were desirous of securing themselves, took such sanguinary vengeance, that the greater part of them were exterminated, and the rest were obliged to return to the upper horde. As they but seldom have the courage to flee from the kirghisian captivity, their number in Russia is but small.

The great similarity between the Bukharians, Chivinsians, Turkostanians, and Taschkentians, affords room to suppose, with some probability, that these nations have all had the same origin; and even they themselves affirm that they are only detached stems of the Turkostanians. The Aralians and the

Truchmenians differ from them in many respects, and the Karakalpaks in still more, and appear to have always been distinct hordes.

9. In conclusion to this enumeration of tartarian nations come the TRIBES OF MOUNT CAUCASUS. From the emigrations occasioned by the military expeditions of the Mongoles and Tartars, the caucasean mountains, owing to their strong, frequently inaccessible formation, together with the fertility of their soil, have preserved not only very many remains of their expelled and fugitive inhabitants, but even so many colonies of the conquerors, that no other part of the earthly globe, of the same dimensions, holds such a variety of nations. As the victorious Tartars, who as it were swallowed up the residuary tribes, and habituated them by degrees to their mode of life, their manners, and their faith, have also confounded these nations and corrupted their languages; accordingly, from the difficulty of reducing them to their primitive stocks, they are usually all comprised, the Georgians excepted, under the denomination of MOUNTAIN-TARTARS. Several of these tribes are properly russian subjects; others are vassals, and others again are protected by Persia and the Porte, or have hitherto maintained their independence. As these relations are occasionally changed according to circumstances, those who cannot properly be classed among the inhabitants of the russian empire should not be entirely passed over; yet we will principally notice only those nations

nations who inhabit the northern half of Caucasus.

We here find, besides the Nogayans and Truchmenians, which have already been pronounced to be genuine Tartars, three particularly numerous and nearly related tribes composing the groundplot of most of the caucasian nations: TSCHERKESSIANS, AVCHASIANS, and ZICHIANs. — In the term TSCHERKESSIANS are frequently comprised not only the two other stems just mentioned, but even several petty tribes of Caucasus, as the Tschetschensians, the Kistenziens, &c. The people properly bearing this name inhabit that part of Caucasus which is called the great and the little Kabardia, the islands of the lower Kuban, and the southern bank of that river. They denominate themselves Adige, that is, islanders; by the Russians they are called Tscherkeffi, and by the rest of Europe Circassians.

This nation is formed of the relics of the mingled swarm usually comprehended under the appellation Alanians, and who, as we have before * seen, settled on the northern side of Caucasus soon after the Yazamates. The Tscherkeffians, or races collaterally related to them, as, for example, the Zichians and Avchassians, gradually took possession of the southern regions adjacent to the Kuban. During the empire of the Chazares, the byzantine emperors appear to have exercised or at least to have postulated a sort of paramount supremacy over this

* See the history of the kubanian Nogays.

nation, because the Zichians were reckoned among their provinces. When the Russians erected a state upon the island and in the city of Taman, [Tmutarakhan*,] the Zichians were tributary to them. But after the Komanes or Polovtzes had conquered the north-eastern part of the Kuban, they put the tscherkessian stems in possession of the southern and western, and extended themselves afterwards continually farther and farther to the north. The Zichians in the Kuban bravely maintained their freedom against the attacks of the Mongoles or Tartars, but were at length in 1277 compelled to yield the victorious arms of Mangu-Timur and Nogay. Yet the subjection of the Zichians and the other Tscherkessians was by no means confirmed, and they remained truly independent in the upper regions of the mountains. They were even at that period still in possession of the whole eastern coast of the sea of Azof, as far as the Don. They rendered themselves masters of the city of Kertsch in the Krimea, made frequent incursions into that peninsula and into other european countries, formed the basis of the then rising caucasean tribes and founded in Ægypt a famous dynasty. At the end of the fourteenth century the Zichians suffered much by the furious victories of the great Timur, who destroyed their habitations and particularly the city Kuban: they recovered, however, from these disasters, and afterwards asserted their liberty with

* For an account of this principality the reader is referred to Tooke's History of Russia, vol. i. p. 385 and seq.

energy and effect against the Ottomans, who, though they captured the cities and fortresses of Taman, Temryuk, and Atschuk, were unable to subdue the Tscherkessians. In the middle of the sixteenth century tzar Ivan II. reduced the Tscherkessians to his dominion, yet only for a short period; the kubanian Tscherkessians, on the other hand, maintained themselves as well on the Don as on the Kuban. There they formed, in conjunction with the Russians, the state of the Don-kozaks; where they retained possession of all the islands of the lower Kuban, the whole of its southern banks and the regions contiguous to the Euxine. These southern people, however, were presently (in the seventeenth century) compelled to acknowledge the paramount lordship of the krimean khan, although they were governed by beys of their own nation. The tribute which they paid to the khan consisted chiefly in beautiful youths and virgins for the supply of his harem. At the commencement of the eighteenth century the Tscherkessians revolted against this humiliating tribute, and put themselves under the protection of the Porte, without, however, becoming subject or tributary to it. About the middle of this century, twenty-nine tscherkessian stems, according to Pessonel's account, were under the krimean khan, who could easily bring into the field a hundred thousand men. But only the least part of these stems were really his subjects; the south-eastern lived almost in an entire independence, or acknowledged only with reservation the sove-

reignty of the Krim. At the peace of 1774 some other districts of the Tscherkessians were ceded to the khan ; but on the seizure of the Kuban in the year 1783 the stems of this people in subjection to the krimian khan fell to the russian empire.

Concerning the present state and the population of the russian Tscherkessians but little can be authentically ascertained, as hitherto no enumeration has been instituted in those parts. All the districts and stems in the Kuban are properly russian subjects, inhabiting the islands of the lower Kuban, the whole southern shore of that river up to its source, and the regions bordering on the Euxine as far as Avchasia ; consequently by the political geography of the russian empire, the circle of Phanagoria of the province of Taurida and the dwellings of the Kozaks of the Euxine.— The Tscherkessians in both the great and the little Kabardia are reckoned only among the vassals of Russia. The sovereigns of that empire style themselves, since the conquest of the upper Kabarda by Ivan II. lord of the kabardinian countries of the Tscherkessians and mountain-princes. This is not an empty title, for notwithstanding that this conquest was afterwards lost, yet the princes of the great and little Kabardèy, several times between the years 1740 and 1750, took the oath of fealty to Russia.

The AVCHASES, who are likewise called Abases or Abasges, dwell on the southern side of the Kuban and on the eastern coasts of the Euxine.

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The proper Avchasia or Abasa is under the ottoman supremacy, having a prince who resides at Anakopia. The western races of the Avchasians acknowledge the paramount sovereignty of the krimean khan; and it is these who at present belong to the russian Kuban. They mostly live about the river Laba.

The ZICHIANs or Tschekians, who are called by the Russians Yasi, are the principal inhabitants of the isle of Taman. They formerly paid a small tribute to the krimean khan, in all other respects are governed by their own beys. The isle Atschuk or Atschuyef is likewise inhabited by Zichians. — These two tribes, which, properly speaking, are only one collateral branch of the Tscherkessians, have belonged to the russian empire, as inhabitants of the Kuban, since the year 1783.

The following tribes are as yet only vassals to Russia. The KUMYKS: they inhabit the plain bordering on the rivers Sunsha and Terek, and in their territory are the famous hot-baths of Kitzliar. — The TSCHESCHENGIANS or Mikschessians, in the eastern part of the great Kabardia, a nation that in time of war can raise five thousand horsemen. — The KISTENZIANS, in the little Kabardia, who are about equal in force to the last-mentioned. — The OSSETINZIANS, or Osses, probably sprung from the antient Uzes or Polovtzes, in the middle part of the caucasean mountains. They consist of several small stems who are either governed by myrzas,

or live under one common prince, who is a vassal of the russian empire.

Of the rest of the caucasian tribes, that are in little or no connection with Russia, the following are the most remarkable: the LESGHIANS, who inhabit the province of Lesghistan in the eastern Caucasus, between Kakhetty and Daghestan. They are divided into twenty-seven stems, and are totally independent. — The TAVLINTZIANS, in the summits of the mountains, consist of several petty tribes, and acknowledge the protection of Persia. — The AMBERLINIANS, in the vallies formed by the mountains of Ghilan, who often change their patron sovereign, and are at present under the persian monarch, &c.

Lastly, the GEORGIANS or Grusinians demand our notice here, not as Tartars, since they have kept themselves from all commixture with that nation, but as the most numerous and powerful body of the mountaineers of Caucasus, which is now for the greatest part subject to the russian protecting authority.

The whole country which goes under the denomination of Georgia or Grusinia, is divided into two considerable christian states. One consists of the kingdom of IMMERETIA, and the principalities of Mingrelia and Gurjel, and is now governed by a common prince who bears the title of tza. Each of these countries had formerly its own ruler, all acknowledging the supremacy of the grand sultan
till

till tzar Solomon united them under his authority and freed them from the paramount Ottomans. — The second georgian state consists of the principalities of KARDUELIA [Kartalinia] and KAKHETTY, which have long been governed by christian princes, in submission to the persian empire, but, since the shock sustained by the throne of the sophys, have rendered themselves independent. Each of these two provinces formerly composed a distinct state; but at present they are both under the sole sovereignty of prince Heraclius of the kakhettian dynasty. The state of Karduelia and Kakhetty borders northwards on the Kabarda, eastwards on Daghestan and Schirvan, southwards on the persian Armenia, and westwards on Immeretia. The residence is Teflis. Tzar Heraclius, who is celebrated for his bravery and other great qualities, as well as by the important part which he acted during the disturbances which agitated Persia after the death of Tamas Kuli-khan, submitted in the year 1783 to the russian empire, thus voluntarily sacrificing an independence which he seemed to have secured by his exploits; but the advantages whereof were richly compensated in the protection he procured by this submission.

SECTION V.

Mandshures.

WE now proceed to the MANDSHURE swarms, comprising only two nations, the MANDSHURES or MANDSHU, and the TUNGUSES. Both nations are related by descent, as appears from their traditions, their language, and their bodily structure. The whole swarm together possesses extensive countries and deserts in eastern Siberia and in the northern Mongolia; the Mandshu are even still very powerful; one of their princely families being in hereditary possession of the throne of China. Since this people can no longer be considered as inhabitants of Russia, without pretending to dive into their antient history, we will only touch upon those of its transactions and events which in some degree concern its relations to the russian empire.

Ere the Russians entered Siberia, the Mandshu were in possession of all Daouria or the eastern Siberia from the Baikal quite to the Mongolian mountains, together with the regions adjacent to the Amoor and its collateral rivers. They were at that time divided into several stems, of which the DAOURIANS inhabited the parts about the Selenga and the upper Amoor, the DUTSCHARES dwelt between the Argoon and the Schilka, the ATSCHARS about the middle Amoor, and the GHILIAKS at the mouth of the Amoor on the coasts of the eastern ocean. —

The

The daourian Mandshu, not waiting for the arrival of the Russians in their territories, retreated to the Amoor and into the empire of China. At the first russian expedition about the middle of the seventeenth century, the Daourians and Dutschares were subjects of the chinese emperor, who, as a native Mandshu, aided their flight, and afforded them protection. The Ghiliaks and Atschares subsisted then in a state of independence, and accepted the russian patronage without opposition. Their example was followed by considerable multitudes of the two other stems; but the greater part of them, by orders from the chinese government, were transported from the Amoor, of which the Russians had made themselves masters, farther towards China. Afterwards, at a peace concluded at Nertschinsk, the whole of the Amoor, with all the Mandshures belonging to Russia, were ceded to China; and at present the mountain-ridge Stannovoi Khrebet, which stretches from Daouria north-eastward between the rivers Lena and Amoor to the eastern ocean, forms the boundary betwixt the two empires. In the frontier-mountains themselves, however, are no Mandshures, but Tunguses, who are partly tributary to the Chinese, partly to Russia, or live in complete independence.

The Mandshu, particularly the daourian, while they inhabited the modern Russia, were by no means an uncivilised people. According to their written accounts and traditions, they had a constitution

tution composed of nomadic and civil parts, and adapted to their situation, their mode of life, and their various exigencies. They lived peaceably among themselves and with their neighbours, sedulously attending to agriculture, graziery, and even to mining. Traces are still seen, about the Bargusin and other rivers, of their gardens, orchards, and fields artfully laid out, and watered with artificial water-courses. The daourian mine-works on the banks of the Argoon, still famous under the name of the nertschinskian mines, as well as all Daouria, afford numerous proofs of the mineral labours of the antient Daourians.

That the TUNGUSES originally composed one people with the Mandshu, is apparent not only from the resemblance of features, manners, and customs, but also chiefly from the agreement of their languages. Indeed in the countries of the Mandshu are ruins and other antiquities, which are not met with among the Tunguses, but both the one and the other confess that they are not the works of their ancestors. Consequently, we are to conclude that a nation lived there before these people, who were either driven out by them, or voluntarily withdrew; it is not improbable that these monuments were the work of the Niudsches, during the government of Kin.

The Tunguses call themselves *Ævœes*, probably from the supposed founder of their race; or, in the manner of most of the Siberian tribes, from the
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the word which in their language signifies *men*. They are called Tunguses only by the Ostiaks of the Yenissey, and the Tartars*. The extensive deserts, in which they have now their nomadizing seats, reach from west to east from the Yenissey across the Lena as far as the Amoor and the Eastern-ocean. From south to north they keep between about the 53d and 65th degree of north latitude, and accordingly neither touch upon the soongarian borders nor the coasts of the Frozen-ocean. Being a very accommodating people, they have admitted into these their seats, Ostiaks, Samoyedes, and particularly Yakutans. The districts we have mentioned lie mostly in the government of Irkutsk; some few races, however, of the Tunguses are reckoned as belonging to the government of Tobolsk.

The first accounts the Russians obtained of these people were from the Ostiaks of the Yenissey; and in the year 1607 Kozaks were first sent from Mangasey against the Tunguses, to force them to submission. At that time many tungusian stems owned the paramount supremacy of the Burats, who had shortly before been expelled from Mongolia. On occasion of the russian attacks, the Tunguses displayed more courage than the other Siberiaks,

* This appellative may perhaps be derived from *Tonyons*, the title of their princes; this name has obtained the superiority with the Russians, and of course with the other nations of Europe. The Tunguses are called, by the Mandshu, Solomi [protectors] or Orontschon [people with reindeer].

and

and not till the latter half of the last century were they brought to that imperfect state of submission in which they are held at present. — By the enumeration of the year 1766 they consisted of twelve thousand males; but besides these, distinct tungusian stems wander among the siberian nations, who together amount to about seventeen hundred yourts or families. Though it is one of the most numerous nations of Siberia, yet, by reason of their roaming way of life, but few stems of them can be actually registered. — The Tunguses, who nomadize about the coasts of the Eastern-ocean, are known under the name of LAMUTS. Of these, in the aforesaid year, only about four hundred men were inrolled to the payment of tribute.

SECTION VI.

Nations of uncertain Origin.

BESIDES the several nations we have named, who can be traced back to some certain primitive stock, there moreover dwell in the russian empire some NATIONS WHOSE ORIGIN IS UTTERLY UNCERTAIN, and who seem to stand in no relation with the branches that are known. All these, from particular resemblances, and from the geographical situation of their homesteads, may be reduced to two classes, one comprising the SAMOVEDIAN, and the other the EASTERN SIBERIAN NATIONS.

I. The

I. The history and the origin of the SAMOYEDS is not much more known even among the people themselves, than by the Russians and the rest of Europe. Leading a nomadic life in bleak and savage deserts, without the arts of writing and chronology, they endeavour to save from oblivion the memory of their transactions and heroes only by songs; which, perhaps with some truth for their foundation, are embellished with so many fabulous additions, that even this mode of tradition affords us no means of becoming acquainted with their ancient state. When the victorious Russians, in the progress of their conquests, came up to this people, they found them already out of their paternal, probably more southern, seats of which they had much earlier been deprived by the Tartars, and nowhere in their peculiar condition; a great part of them having separated, on their flight, from their correlative stems. Far from adequately discriminating these nations and stems, the very names of them are either confounded or disfigured, or arbitrarily invented; and, even since their subjection, little or nothing has happened that might tend to the elucidation of these accidental perplexities. The cold and trackless wilds of the Samoyede nations have never yet been trod by the foot of any inquisitive traveller; the collectors of the tribute and surveyors, from whom we might expect some sort of information, have naturally more in view their proper business and the advantages of traffic, than the collecting

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ing of historical accounts; and out of their territory individuals from these tribes are very seldom seen. — In spite of all these obstacles, the striking harmony of languages, as well as the great similarity in mode of life and bodily formation, evince the near relationship of the stems and nations which we now with reason class under the denomination of Samoyede.

The present home of the PROPER SAMOYEDS are the coasts of the Frozen-ocean, from about the 65th degree of north latitude, quite up to the sea-shore. Novaya Zemlia indeed is not inhabited by them, but eastward across the Yenissey extend the coasts on which they swarm up to the 75th degree of latitude. In these regions, the coldest, rudest, and most desolate of all the earth, dwell the Samoyedes, solitary indeed and scattered, from the White-sea to the other side of the Yenissey, and almost up to the Lena, therefore both in Europe and in Siberia. They call themselves Nenetsch, persons, or Chosovo men. The origin of their usual appellation is uncertain.

Those on the western side of the Ural, or the EUROPEAN SAMOYEDS, were tributary to Russia so long ago as the year 1525, consequently long before the reduction of their Siberian relatives. The regions here over which they stray are about and between the rivers Melen and Petschora, therefore in the governments of Archangel and Vologda, where they live independently, in a state of separation from other nations. — The SIBERIAN SAMOYEDS,

MOYEDÉS, on the eastern side of the uralian mountains, are in the government of Tobolsk, along the coasts of the straits of Vaigat, about the exit of the Oby, between the Oby and the Yenissey, and in the parts contiguous to the lower Lena. Collectively they are more numerous than the Ostiaks, but like them only singly and dispersed in the prodigious tracts of country occupied in common by them. Among the nations that apparently stand in various degrees of affinity with the Samoyedes, are two kinds of OSTIAKS. Of the origin and import of this name an account has been already given beneath a former head *; where we likewise saw, that under this denomination three tribes were comprehended, namely: the Ostiaks of the Oby, of the Narym, and of the Yenissey. The first of these manifestly belong to the finnish hive; not entirely with the like conviction, we arrange the two last among the Samoyedes. — The NARYM OSTIAKS, who are also called Motases, are about the upper parts of the Surgut, in the districts of the Oby quite to the Narym, and about the mouths of the rivers Ket and Tom. — The YENISSEY OSTIAKS, though they resemble the two other nations of that name in appellation and mode of life, yet speak a language so entirely different from that of the Ostiaks, as well as from all the siberian tongues, that they might be rather taken for races of a particular nation, though not the

* See the article FINNS, ante sect. 2.

smallest indications of their origin has been hitherto discovered*. These dwell about the inferior Yenissey, near and between the Samoyedes. When the Russians, in the seventeenth century, had extended their conquests hither, these Ostiaks not only immediately submitted, but also assisted the Russians to subdue the neighbouring nations. In proportion to the dimensions of the ground they occupy, they are not numerous.

The following petty tribes, on account of their similarity in features, manner of life, and language, are with great justice classed with the Samoyedes: the KOIBALS, on the Yenissey; the SOYOTES and MUTORES, both in the sayane mountains; the TUBINZES, on the left shore of the Yenissey; the KAMATSCHINTZES or Kaimasches, round the source of the rivers Kana and Mana; the YURALES or Yurakes, between the Oby and the Yenissey; the KARAGASSES, in the udinskoi circle, and a few still more inconsiderable remnants of nations.

2. The nations which we comprehend under the general head of EASTERN-SIBERIAN NATIONS are the Yukaghires, the Kamtschadales, the Koriaks, the Tschuktsches, and the inhabitants of the north-eastern Siberian-american Archipelago, the Kuril-

* Among the Tartars of Krasnoyarsk, Asanes, or Ossanes, the Chotovtzes, and Schatka, the Arintzes speak this language, though in different dialects. They are not therefore Tartars, because they have intercourse with the Tartars, and, though following the same mode of life, have another language; probably they are a mingled remainder of the Yenissey Ostiaks.

lians, and the Aleutans. Of these several people, the Yukaghires have a certain resemblance with the Yakutes, the Tschuktsches with the northern-landers, the Kamtschadales with some of the Kurillians, and the Koriaks form as it were the connecting link between the Tschuktsches and the Kamtschadales. Yet, after all, the variations of these nations are still greater than their points of resemblance; therefore, till we have more accurate historical accounts, which are here entirely wanting, and of obtaining which scarcely any hope can be entertained, they cannot be reduced to any common origin. For which reason we are only able here to rank them according to their geographical situation, and not by their supposed affinity.

The north-easternmost part of the terra firma of Siberia was known to the Russians in the latter half of the seventeenth century: the conquest of it, however, proceeded but slowly, from the innumerable obstacles they had to encounter. Till the year 1690 nothing was known of Kamtschatka, except what was told in vague reports: the possession of this country was entered upon in 1696. The Kurilly islands were discovered in 1710. In the year 1727 the maritime expeditions were begun under the command of captain Behring, which continued till the year 1741, and by which the north-eastern coasts of Siberia, the inland sea between Siberia and America, and even that continent, were in part newly discovered, and partly accurately

explored and ascertained. These countries and islands were afterwards visited by russian * hunters and merchants, and by degrees made tributary. Tschuktschi-nofs, or the promontory of Tschuktschi, and in general the region adjacent to the Anadyr, were earlier known than Kamtschatka, having been conquered in 1738. But, it being extremely difficult to retain the savage inhabitants of these wild and dreary regions in obedience, they have been abandoned from time to time to their independence. The obstacles and difficulties arising from the great distance, the pathless regions and the rudeness of the inhabitants, have hitherto rendered a more particular knowledge of these nations nearly unattainable. All that we know of them consists in some broken accounts collected and published either by passing mariners, or by unlettered hunters and merchants. Besides, but little information is to be expected of the origin and transactions of tribes who live without writing, and perhaps even without traditions.

The YUKAGHIRES occupy the northernmost parts of the territory of the Yakutes bordering on the Frozen-ocean, from the Yama to the Kolyma. They were known to the russian conquerors as early as the Yakutes; but, owing to their wild and impassable deserts, could not be completely brought to subjection till the year 1639. They had never seen a horse, though that species of ani-

* Promuifchlenniki.

mals was found among the Yakutes, and therefore they appear to have been for a great length of time confined to their cold, fenny, and mountainous districts. The whole people, at the revision before the last, paid taxes only for about a thousand heads; but it was so easy for them in their deserts to evade the payment, that their entire population may be computed at a much higher number.

The dreary, rocky, unfruitful mountain-ridges, which form the peninsula of Kamtschatka, have always, in all probability, had their peculiar inhabitants: namely, the Koriaks in the northern part opposite the continent, and the KAMTSHADALES on the southern parts of the peninsula. These latter call themselves Itelmans, that is, inhabitants. The country has its name from the river Kamtschatka, which again was so called, it seems, from some brave warrior named Konfata. The origin and the fates and fortunes of the Kamtschadales are utterly unknown. By their language, mode of life, and bodily formation, they may be taken to be a distinct people, related with some neighbouring islanders. Their number, according to the enumeration of 1760, amounts to about three thousand males; but it may be admitted to be really three or four times larger.

The KORIAKS probably have their name from the word Kora, which in their language signifies a rein-deer. They dwell about the northern part of the penshinskoi-gulf and in the north of Kamtschatka,

near and among the Kamtshadales, Tunguses, Lamutes, and Tschuktsches. The circumstance that they do not appear in the history of their southern neighbours, and still more the great likeness they bear to many islanders of the Eastern-ocean, and even with the nearest Americans beyond the straits, gives room to suppose that they, and for the same reasons the Tschuktsches, are the primitive possessors of these coasts, who either came over from the continent of America, or were divided by the probable infraction of the sea, and the consequent separation of the two quarters of the world. In numbers the Koriaks are about equal to the Kamtshadales.

The TSCHUKTSCHES occupy the north-eastern point of Siberia towards the Frozen-ocean and the Eastern-ocean, which is called the Tschuktschycap, and have in all respects so much similarity with the Koriaks, that one might easily be tempted to take the two nations for relational stems. They may be computed at four thousand bows.

The KURILLIANS are the inhabitants of the islands, named after them, in the Eastern-ocean. They bear not all the same appellation, and likewise differ much in language and manner of life; some verging more upon the Japanese, and others on the Kamtshadales. In the year 1766 all the inhabitants of these islands tributary to the Russian empire were registered at two hundred and sixty-two heads.

The

The ALEUTANS, lastly, inhabit the chain of islands denominated from them, extending from Kamtschatka north-eastwards to the continent of America. In proportion to the dimensions of their islands they are tolerably numerous, and at present are mostly subject to the tribute.

SECTION VII.

Dispersed Bands of European and Asiatic Nations.

THE last Section of this classification comprises the several BODIES OF EUROPEAN AND ASIATIC NATIONS DISPERSED IN VARIOUS PARTS OF THE EMPIRE. The number of them all together is indeed very considerable; but each distinct nation is not sufficiently numerous for being here allowed a separate place. Besides, the majority of them are only emigrated colonies from larger nations, who have voluntarily settled on a variety of occasions and in different ways in the several provinces of the Russian empire. We here pass over at once the colonies before-named, as enough has been said concerning them.

Of all the European nations that fall under this head, none is more numerous than the GERMAN. In the governments of Riga, Reval, and Courland, they form the most considerable, though not the

most numerous part of the inhabitants. The nobility in these provinces consist mostly of the descendants of the teutonic knights, who, at the commencement of the thirteenth century, conquered these countries for themselves and the church, and made the natives their slaves. Even the burghers and free people, or the greater part of the townsmen, are Germans, who have gradually, since the discovery of Livonia, resorted thither and settled. Their number is very considerable, and though it be greatly exceeded by that of the proper natives, the Lettes and the Esthonians, yet the german language may be considered as predominant in those governments. According to a probable calculation, founded on the last enumeration, the Germans residing in the government of Riga amount to thirty thousand, and those in that of Reval to fifteen thousand; in Courland they are probably still more numerous. Both in Mosco and in St. Petersburg they live by thousands; in the latter alone they are known to be upwards of seventeen thousand. Even in the government of that city, as well as in that of Vyborg, they form no inconsiderable part of the nobility and citizens. As colonists, properly so called, or countrymen, many thousand german families came in 1763 into the governments of St. Petersburg, Saratof, Voronetch, and Tchernigof, as settlers, the number of whom since the year 1783 is much increased by new settlements in the government of Ekatarinofslaf, and in the province of Taurida.

rida. All these and the multitude of such as live separately about the empire, taken together, may probably far exceed a hundred thousand.

Of the other european nations, there are only detached colonies, especially in the large towns. In the governments of Vyborg and Reval, and on some of the islands of the Baltic, a number of the inhabitants are SWEDES, though not to a considerable amount. The islands Vorms and Rugen in the Baltic are partly inhabited by DANES. These, however, as well as people from the other european nations, are most numerous in Mosco and St. Petersburg, and in some of the great towns of the empire. In most of the sea-ports are ENGLISHMEN, who, however, seldom fix there, but as soon as their affairs will permit, return to their native country.

FRENCH are dispersed in considerable numbers over the whole empire; the plan lately devised for establishing a colony of emigrants in the southern governments, has not hitherto been put into execution. Besides the ITALIANS we meet with in the capital towns, there are also in the province of Taurida some remains of that people, the descendants of those who settled there during the period that the Genoese were in possession of the peninsula.

GREEKS are in Little-Russia, at Neshin, in the government of Tchernigof, in that of Ekaterinof, and in Taurida, where they form in some measure respectable colonies. Their number in the Krimea was formerly very considerable; but
in

in the year 1778 the inhabitants of the Krimea, who were of the greek religion, applied by a rescript subscribed by the metropolitans of Gothia and Keffa to the empress, requesting to be admitted as subjects of the russian empire, which was granted by a manifesto in the year 1779. The empress defrayed the expences of their transport from the Krim, and assigned to them a considerable tract of country bordering on the Solonoya and the sea of Azof: the merchants, however, and the trading part of the colony were sent to the newly erected towns of Ekatarinossaf and Mariupol. After the russians had had taken possession of the Krim, the Greeks for the most part went thither again. — In the government of Ekatarinossaf are also ALBANIANS, MOLDAVIANS, VALAKHIANS, and ARNAUTS, though in no great numbers.

The OTTOMAN TURKS, who, either by the fortune of war, or by the capture of particular cities and provinces, are become subjects of the russian empire, have for the greater part dispersed; they no where form what may be properly called colonies, yet they are found together in small numbers at Orenburg, in the former Otchakof-steppe, and in other places. — In the districts of Astrakhan and Orenburg are found many PERSIANS; also on the Kamma there is a colony of Persians and ARABS. — The ARMENIANS are particularly numerous in the towns of Orenburg, Kitzliar, Mosdok, St. Petersburg, and Mosco; but especially in the governments

ments of Caucasus and Ekatarinossaf, where they compose a colony consisting of some thousands. The town Nachitschevan, on the Don, is almost entirely inhabited by them. They were formerly, next to the Tartars, the most numerous in the Krim; but a great part of them in the year 1779 withdrew with the krimean Greeks into Russia. — In Astrakhan and Kitzliar are likewise settlements of INDIANS, who partly originate from Hindostan, and partly from the province of Multan.

To conclude; there are in Russia very considerable colonies of the two wandering nations, who are everywhere at home, and have nowhere any country, namely Jews and Gypsies. The JEWS are in great numbers throughout the polish provinces which now belong to the russian empire; and they are seen in pretty strong bodies on the borders of the neighbouring governments: whereas in the rest of Russia they are found very sparingly, and in most parts not at all. Taurida, however, is an exception to this, where they are partly fixed as antient inhabitants. At the time when the Chazares were masters of the Krimea, even some of their soveraigns, according to their traditions, professed the religion of Moses. — The GYPSIES are particularly in the provinces of both Great and Little Russia, where they stroll about in large companies.

FROM this contracted view, in which some few other petty tribes are entirely overlooked, it appears that the inhabitants of the russian empire form at least EIGHTY DISTINCT NATIONS, as well in their lineage as in their manners and their language essentially different from each other *. — To see so extraordinary a multitude of nations and tribes united in one body-politic is certainly a curious phenomenon, of which we should look in vain for another example in the history of the world. This mingled mass of people, so extremely numerous, presents a spectacle which must be highly interesting to every reflecting observer. Its physical, civil, and moral state forms a grand and instructive picture, in which are seen all the modifications whereof this state, by the most various causes and operations, is susceptible: a commentary on the history of mankind, illustrative of the gradual development of civilization by the most lively and striking example. — On the whole scale of human nature, from the rude and brutal condition to the summit of sensible and intellectual refinement, there is scarcely a remarkable transition which may not be matched from the foregoing list. Here are seen nations of HUNTERS and FISHERS, roaming about their forests, without permanent habitations, defy-

* In this enumeration, the collateral branches of the Russians, Kalmuks, and Tartars, as well as the relative tribes of the Ostiaks of the Yenissey, are not included.

ing all dangers and indifferent to the accommodations of life, who have scarcely any notion of property, who feed upon raw flesh and unprepared fruits, and wrap themselves in the skins of the beasts with which they contend for their existence, and by which they sustain their lives. — Near to these we find PASTORAL nations, obtaining their nourishment, their clothing, and even a sort of affluence solely from their flocks and herds ; living with them in moveable tents on everlasting perambulations, and passing their days in a patriarchal simplicity of manners, generally without the art of writing, and without the knowledge and use of money. — Again we behold nations, who devote themselves to the labours of AGRICULTURE, carrying on their various occupations, one while incomplete and directed to single objects, at another on a general scale and with ingenuity and industry. We observe the progress of culture, in regions where the virgin earth, the first time for thousands of years, opens her bosom to the strange hand of the countryman ; and, where instead of temporary huts of felt, houses and villages arise to our view. — With equal surprise we see villages changed into towns, and houses into palaces, where PRODUCTIVE INDUSTRY has erected her manufactories, and where diligence collects the products of the distant parts of the world for traffic.

As all the gradations of living are found among the inhabitants of the russian empire, so we see also
examples

examples of all the modifications of CIVIL CONSTITUTION. Among the Tschuktsches and the inhabitants of the Eastern-isles we scarcely find an idea of social connection ; among other nations in the east of Siberia and among the Laplanders, we perceive in the FAMILY-GOVERNMENT of fathers and elders, the first rude sketch of monarchy ; but far more considerable is the number of those who divide themselves into STEMS and HORDES, which are again parted into races. A pure DEMOCRACY is discernible in the generality of the branches of Kozaks ; while the Kalmuks and Kirghises have a mixed REPUBLICAN MONARCHY. Not less numerous are the corruptions of these several forms of government, which all at last dissolve into the elements of UNLIMITED MONARCHY. — Some nations have a FAMILY-NOBILITY hereditary in their offspring ; while others have only a PERSONAL-NOBILITY, founded on the respectability of age, on the influence of wealth, or on the brilliancy of personal talents. — Of all the modifications of civil constitution none is perhaps so singular as the military democracy of the Kozaks, the essence and aim of which is war, and even of which we have been witnesses of a corruption, in its denying the other half of the human race all civil and domestic community.

Not less edifying and diversified is the view of the RELIGIOUS IDEAS AND FORMS OF WORSHIP which these nations have adopted for the service and the honour of the Supreme Being. We find in the
russian

russian empire not only the generality of the known parties and sects of the CHRISTIAN faith, but the JEWISH, the MOHAMMEDAN, the LAMA, and the SCHAMANE religions have here their numerous votaries. — From the most monstrous POLYTHEISM to the total unacquaintance with any idea of a supreme intelligence, there are innumerable turnings in which the human intellect may stray, and the religious opinions of the savage and half-savage tribes of the russian empire present us with no inconsiderable a supplement to the history of these aberrations.

Great as the difference is between the modes of life, constitutions, and religions of the inhabitants of the russian empire, so motley and various is also the picture of their PHYSICAL CONDITION, their MANNERS, CUSTOMS, DRESSES, DWELLINGS, UTENSILS, and WEAPONS. What a contrast between the flat, broad, beardless physiognomy and the yellow figure-painted skin of the east-iberian nations, and the european form and complexion of the several genuine russian stems! What a distance from the earth-holes of the Samoyedes to the palaces of the residence, from the needle-work of fish-bones and sinews to the weaving of tapestry, from the sling and the arrow to the fire-arms of the modern art of war in Europe! — If the view of such a great and striking diversity in all the concerns of mankind, and in all the displays of their activity, afford instructive and entertaining matter for reflection,

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our astonishment is not less excited by the consideration, that this prodigious mass of people can be kept in the most unconditional submission to the unlimited will of one ruler, and the confluence of all forms of government, however great their diversity, maintained in the general form of one state. The key to this singular phænomenon is to be drawn from the political and religious toleration which marks the spirit of the russian monarchy. In no state of the world is there a completer uniformity and unity of administration, though nowhere is the physical and moral variety greater than here. Forbearance is shewn in all regards, which do not oppose the being and aim of the government; and the omnipotence of the unlimited will is only apparent where the direction of all the energies is necessary to one end. — Thus, the individuals of this extensive empire have a sphere in which they may range, till, by their gradual approach to civilization, one great and happy nation may arise from the multifarious aggregate of hives of which it consists — a period which the philosopher looks forward to with pleasure, and which Catharine the legislatrix has accelerated by more than a century.

V I E W
OF THE
R U S S I A N E M P I R E.

B O O K III.

PHYSICAL STATE OF THE INHABITANTS.

WE have been contemplating the inhabitants of the russian empire according to their several descents: we will now inquire into their PHYSICAL STATE. — From the great diversity which the mixture of so many nations, considered even in this point of view, produces, it will be necessary to assign certain bounds to the contents of this division of our work, and to treat the subjects of it in a particular order. Let us therefore first examine the present state of the amount of the people and the population, as well in regard to the whole empire, as to the particular parts of it; then turn our eyes upon the public institutions which have in view the preservation and increase of the population; and lastly endeavour to point out the physical characteristics of the inhabitants according to their primary descents.

SECTION I.

Population of the Russian Empire.

DISTINGUISHING the term *population* from *populousness*, we understand by the former the bare number of the inhabitants of a country ; by the latter, on the other hand, the relation it bears to the superficies of the ground on which they dwell. This explanation being premised, no doubt can be entertained that the russian empire, which, in regard to its superficial contents, is exceeded by no country in the world, must also, in regard to the number of its people, be reckoned among the most powerful. The knowledge of this important subject is founded on the enumerations or revisions, as they are styled in Russia, which were first set on foot by Peter the great in the year 1723, and which have since been repeated at the distance of every twenty years. The occasion of these enumerations was the collection of the head-money, or the personal tax which every male belonging to the class of either boors or burghers is bound annually to pay, and which has continued to be the main object of these revisions to the present day. Agreeably to this end, therefore, they neither extend through all the ranks nor all the tribes of the empire ; the nobility, the clergy,

clergy, the whole military and civil establishment, the court establishment, the schools and seminaries, the greater part of the nomadic nations — as well as the whole female sex, are excluded. On the other hand, in the register of the revision appear all the males of the classes subject to the poll-tax, the suckling as well as the superannuated old man; and neither the births nor the deaths are brought into the account till the succeeding enumeration. At the first revisions were omitted likewise the provinces of Livonia and Little-Russia, which at that time paid no head-money; and as the management of that business was given to commissaries who had more in view their private interest than the truth of the estimate, it is not surprising if their statements generally proved short of what the real number of the people might be.

At the first revision in the year 1723 (which, however, as well as some of the following, were never entirely finished in one year) the persons subject to the tax were given in at 5,794,928. In this statement are comprised the boors working in the mines in the year 1735; but all the provinces and ranks which at that time were not subjected to the head-money were omitted. At the second revision, in 1743, there were found 6,643,335, and at the third 7,363,348; which sum, if we double it for the female sex, and join them with the later enumerations in the provinces not subject to the poll-tax, a total will arise of about twenty millions of persons which the russian empire may have contained

tained about the year 1763 in the enumerated classes*.

A very different and far juster result proceeds from the fourth revision, which was made in the year 1783 on better principles and with greater accuracy. The main object, to learn the number of the taxable people, was still the basis of this census, but it was also extended over all the provinces then subject to the russian sceptre†, including the female sex, and several ranks and tribes till then omitted; the estimates were not, as before, entrusted to particular revisors, but were made out by the town-magistrates, the noblemen, the presidents and elders of the crown-boors, in which they were greatly assisted by the union of the former large governments and the newly-instituted viceroyalty-constitution; the whole enumeration was completed in one half year, (from the end of the year 1781 to July 1782,) and only the governments of Kolhyvan, Tobolsk, and Irkutsk, on account of their being so vast and so remote, were left till January 1783; the statements were ordered to be made out according to prescribed schedules of a tabulary form, in which regard was had to several political

* The same amount is given by Schlœtzer for the same time, in his book on the innoxiousness of the small-pox in Russia, p. 132; but he seems to have included all the classes of people, numbered and unnumbered.

† Among which remains hitherto unnumbered, the first acquisition from Poland of the year 1773, containing 1,226,966 inhabitants.

matters;

matters; at the same time they were directed to be made with the utmost accuracy, and the penalties were very severe in cases of concealment or evasion *. By the lists of that revision, there were found to be, in the forty-one viceroyalties of which Russia at that time consisted, of male inhabitants:

Merchants	- - - - -	107,408
Burghers	- - - - -	293,793
Odnodvortzi and free coun-		
trymen	- - - - -	773,656
Exempt from taxes	- - -	310,830
Crown-boors	- - - - -	4,674,603
Private-boors	- - - - -	6,678,239
Together		12,838,529

The number of females was only known of some governments; if we double the above amount for them, we obtain in the enumerated classes of the said one-and-forty viceroyalties, a total of 25,677,000 persons of both sexes. — The authenticity of these statements can only be liable to one doubt, namely, that the real number of the people may be *greater* than by the enumerations it appears to be: for, as every man marked in the revision-lists actually pays his tax, it is not to be conceived that these lists make the population to be larger, though it may easily be supposable that they make it

* The imperial manifesto and decree of the senate concerning the fourth revision, in the St. Petersburgische Journal of the year 1781, tom. iv. p. 192.

smaller than in fact it is, because concealment is attended with such a material advantage.

Thus far we are enabled to ground the calculation of the number of the people on actual enumerations; but for the state of the unnumbered classes, and for the increase of the population, as well by the great acquisitions since the year 1783, as by the very considerable surplus of the births, and the numerous accessions of foreign colonists, we have only probable and partly-authenticated data to proceed upon; as the result of the fifth revision, in 1796, if it be published, is not yet come to hand. In the mean time, the following calculation, made with the greatest nicety of examination, may well be admitted to supply that defect.

By the revision of 1783, there were in the said forty-one governments, computing the female sex as equal to the male, of registered persons - - 25,677,000

The amount of the Kozaks of the Don and the Euxine, according to the most authentic private accounts, at least - - - - - 220,000

For the unnumbered tribes and classes at the time of the fourth revision, we cannot, without the highest improbability, allow less than - - - 1,500,000

Consequently, the russian empire, in the year 1783, might have inhabitants amounting altogether to - 27,397,000
According

According to the results deduced from experiments and observations on the fruitfulness and mortality in Russia, this mass must of itself have increased annually more than half a million. If, in order to keep as far as possible from all exaggeration, we deduct the half of this surplus of births, to allow for the diminution it may have suffered by an extraordinary mortality, as by war; there remains for every year an increase of 250,000 new citizens, which, exclusively of all ascending proportion, in twelve years makes a sum total of 3,000,000

The new acquisitions since the year 1783, or the present nine vice-royalties of Taurida, Minsk, Bratzlau, Vosnesensk, Podolia, Volhynia, Courland, Vilna, and Slonim, contain, according to a legitimated statement already mentioned *, - - 5,755,000

Consequently, we may admit, by the most moderate estimate †, the population

* See vol. i. p. 294. note.

† That the reader may be enabled to judge for himself of the fairness of this statement, we will here bring together some particulars, viz.

lation of the russian empire at present to be - - - - 36,152,000
or in a round sum thirty-six millions
of persons.

Of

The land and sea forces, with the militia, or the military commandos of the several governments, including wives and children, can scarcely be set down at a lower number than - - - - 800,000

According to the establishment of the viceroyalties every government consisting of ten circles has about six hundred civil-officers, without reckoning the host of chancery-placemen and scribes, and besides the watchmen, money-tellers, couriers, &c. If we reckon the said forty-one viceroyalties on an average at ten circles each (most of them have from twelve to fifteen) and the number of all the officers and servants at only a thousand persons; tripling this sum for such as are married and their families, it yields - - - - 120,000

The custom-house officers, strand-surveyors, strand and frontier riders, postmen, &c. with wives and children, we will only compute at - - - - 80,000

The amount of the russian clergy is commonly estimated at sixty-eight thousand persons, of whom the generality are married secular priests. Including their families we may properly give this class at - - - - 200,000

These few heads therefore, by the lowest estimate, already produce - - - - 1,200,000

persons; and yet we have omitted the whole nobility, the court establishment, the imperial colleges, the academies, schools, and seminaries of education, the foreigners, the major part of the inhabitants of Mosco and St. Petersburg; here are also wanting the

Of this prodigious mass the greater part by far belongs to European Russia. The five governments of Perm, Ufa, Kolhyvan, Tobolsk, and Irkutsk, comprehended under the general name of Siberia, contain all together, according to the revision-lists, only 2,215,000, or, with the unnumbered classes and tribes, perhaps above three millions and a half of inhabitants. The population of the european part is therefore about fourteen times greater; and the russian empire, which in regard to its superficial contents mostly belongs to Asia, must in regard to its population be reckoned as belonging to Europe.

On the scale of the population of the european states, Russia holds the second place, having in this

the wandering or uncivilized tribes, the vagabonds, and fugitives, &c. as well as the prisoners and criminals condemned to the public works, the number of whom would be incredibly large, if it were not at times diminished by manifestos of grace. — That our statement is not too high, if we reckon all these descriptions at 300,000, will be evident from the following comparison. In the forty-one governments of the russian empire no more than twelve of them have delivered in any near statement of the female sex or the exempted classes; and though even of these twelve estimates not one is entirely complete, yet the difference amounts to upwards of 1,607,000 persons, as the sum of the inhabitants of all the forty-one governments, by the revision-lists, is only 25,677,000, but according to the statistic tables it is set down at 27,284,000. How much more considerable would not this difference be if we had only from all the governments *such* data, and how entirely different would the result appear, if it could be made out of *all* the classes and with the utmost accuracy.

respect

respect only the ottoman empire above it, which is usually admitted to have forty-nine millions of inhabitants, whereof eight millions are stated to be in Europe, thirty-six in Asia, and five in Africa. Excluding the parts of both these countries which lie out of Europe from this comparison, it will follow that Russia has the largest population of all the states of Europe. — The countries which come nearest to the russian empire in this regard, are the germanic states, which may be admitted at twenty-six millions; France, to which we may still, notwithstanding the havoc brought on by various means since the revolution, allow twenty five millions; and the states of Austria, which may be taken at about an equal number. Of the neighbouring states whose relative interests are of importance to Russia, Prussia and Sweden are the most remarkable. The former, with its lately acquired possessions in Poland and the circle of Franconia, has about the fourth; the latter the eleventh part of the population of the russian empire.

The relative proportion of the population in the several governments varies very much. According to the precept that was issued concerning the erection of them, each was to contain not more than between three and four hundred thousand males; but, as by reason of a difference in local circumstances, it was found inconvenient to adhere strictly to that injunction, many governments obtained at their
very

very first erection, some a larger and some a smaller number of persons; and this inequality has since been considerably augmented by the natural increase, and by new comers on one hand, and emigrations on the other. The most populous government is at present that of Mosco, which, including the metropolis, contains upwards of 1,139,000 persons; the lowest population is that of the province of Taurida, which is computed to have about 150,000 inhabitants. — Several of these governments, in regard to population, may vie with foreign kingdoms; as the government of Mosco, which is on a level with Denmark; or that of Caucasus, which (though only the thirty-seventh in the gradation of the several governments) is equal with Sardinia.

Although the bare knowledge of the number of people in a state affords very remarkable and fruitful results, yet it is properly the proportion of this mass to the extent of the country inhabited by them, by which any determinate notion of the intensive power and culture of it can be obtained. The russian empire, which, from its colossal mass of people, is at the head of all the european states, takes, in regard to its *populousness*, but a very subordinate place. Without pretending to bring it into comparison with Sweden, poor as it is in people, which reckons about two hundred and twenty inhabitants to every square geographical mile, the russian empire has (according to the above stated proportions of the superficial

ficial contents with the population) only about one hundred and nine on an equal space.

In a state, however, of so prodigious a magnitude, and containing so many tracts of country entirely uninhabited, or uninhabitable, such a general comparison as this leads to very unsafe or totally false conclusions. The bare distinction of the european from the asiatic Russia yields a very different result: the former having a population of four hundred and five, the latter of eleven persons to a square mile. On pursuing this distinction farther, by comparing the governments with each other, the product will be, that of forty-five of them, (the five newly acquired not reckoned,) eight contain below one hundred; nine contain from one hundred to five hundred; seventeen from five hundred to a thousand; seven from a thousand to fifteen hundred; three contain from a thousand five hundred to two thousand, and only one above two thousand inhabitants on a square mile. This last honourable precedence is held by the government of Mosco, which (including the metropolis) numbers 2403 persons on the aforesaid superficies. To the second class belong the governments of Kaluga, Tula, and Tchernigof, and to the third, Riasan, Kursk, Kief, Orel, Kharkof, Yaroslaf, and Novgorod-Sieverfk. The sixth and poorest class comprises, with the countries of the Kozaks, especially the north-european and siberian deserts; and here the degree

degree of population falls so low, that of the governments of Tobolsk and Irkutsk, the former has but seven, and the latter only three persons on every square geographical mile. However, we must not forget to remark, that it is exactly in these countries that the unregistered tribes are the most numerous. — Moreover, these statements should be considerably heightened throughout, to bring them nearer to the truth, as neither all the classes of people, nor the increase of the population since 1783, are accounted for in them.

The most populous district of the Russian empire is, therefore, the tract of country between the 49th and 58th degrees of north latitude; farther to the north and to the south, as well as eastwards beyond the 65th degree of longitude, this richness in people is continually decreasing. And yet even that happy tract of country, small as it is in extent proportionately with the enormous magnitude of the empire, is not to be compared to the population of other states, though even far behind it in regard to naturally favourable circumstances. If Russia possessed only in its best and most fertile provinces a generally equal population with the governments of Kaluga, Tula, and Tchernigof; in that case the European part of it alone would have greatly above a hundred million of inhabitants.

Nothing seems at first sight more striking, than this deficiency of people in a country that possesses an inexhaustible and partly still unemployed store of
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all the material necessaries of life ; where the countryman, at least in the inland provinces, may use all the treasures of nature without limitation ; and where the public taxes are so moderate and so uniformly distributed. This apparent contradiction may, however, be very easily explained by affording some attention to the following considerations.

The degree of population to which any country can attain depends equally on the natural quality of the soil and climate, and on the industry of the inhabitants. Where these circumstances with their concomitants exist in the highest perfection, the population must naturally attain to the highest degree : but rarely as this is the happy lot of small detached provinces, so impossible is it to be the case in all the parts of a large dominion. The russian empire comprehends within its circuit prodigious tracts of country, which on account of their rude climate are utterly uninhabitable ; it contains, even in its best climates, districts which, by reason of the total failure of wood and water, for ever defeat all attempts that are made to render them habitable ; in other provinces the industry of the people is so little favoured by nature, that the want of provisions is the cause of emigrations. These regions then are not to be accused of a defect of people, but may rather be said to be proportionately very well stocked, since, according to circumstances, no more people could live there than actually do. — But that even in the fertile provinces the population is but moderate

rate

rate in comparison with other european states, is to be explained from the following arguments: first, from the species of employment from which the inhabitants draw their support. A country, whose industry is employed in working up raw materials, can maintain more people than another, where the whole profit arises from the industry exerted in raising the natural products. The inhabitants of the russian empire derive their chief subsistence only from the latter; and even in this there are variations which have a powerful influence on the population. In the regions where the nomadic nations devote themselves exclusively to the chase, the fishery, and the breeding of cattle, the population can never, in the nature of things, attain to the same degree as with the Russians who pursue agriculture. — Again, if we bring into the account the numerous colonies which this better part of the russian empire has produced, and still daily produces for the enormous wastes of Siberia, and in general for all the possessions acquired since the sixteenth century, we may justly be amazed that the population of the middle of Russia proper does not fall far lower.

These considerations, which, were we to prosecute at length, would lead us too far, furnish us likewise with a standard by which we may measure the progress of population for the future. It will and must increase in the same ratio in which the industry and diligence of the nation enlarges and refines. The more agriculture spreads among the
nomadic

nomadic people of the steppes, the more the establishments for working-up the native raw products multiply, the more alert the industry in the newly-erected towns, and the more quick the inward and outward circulation of the present riches of the country, — so much the more numerous will also the population be. The superfluity of people will at length overflow from the plentiful regions into the deserts, in order to gain from parsimonious nature, by increased exertion, those bounties which, though withheld, are never entirely refused to industry and perseverance.

Distant as the population of the russian empire at present may be from so high a pitch, certain it is that it is continually approximating it in an ascending ratio. This is proved by that political arithmetic which examines the advancement of population by the laws of nature, and compares it with the data which the government of every country presents for that purpose.

It is a known fact, that the fruitfulness and the mortality of the inhabitants of all countries observe a certain relative rule, which is in proportion to the influences upon it produced by physical, moral, and political causes. From the investigations that have been made on this subject, it is plain that the actual population everywhere, if no unnatural obstacle intervene, neither declines nor stands still, but must go on augmenting. The results which have been drawn from innumerable concordant observations,

yield the following general mean-proportion by which the progress of population, taken on the whole, proceeds: that, namely, of thirty-six persons annually one dies, and that to ten deaths on an average, ordinary years set off against epidemical, twelve or thirteen persons are born. Wherever the progress of population deviates from this rule, either very advantageous or very detrimental circumstances must operate. Hence we see how important and instructive such investigations, applied to particular countries, may be, as well for the political knowledge of it, as for the administration itself. We learn from them not only the influence of the natural quality of the country on the propagation, longevity, and mortality of the inhabitants; but they not unfrequently detect some latent evils of a moral or political nature, the noxious effects whereof might otherwise long lie concealed even from the most vigilant government.

The ground-work of these investigations are the lists of marriages, births, and deaths, on the accurate and careful construction of which the credibility and the practical utility of the calculations and conclusions entirely depend. In Russia such lists are indeed annually made out and delivered to the proper offices; but they are so defective, and the use that is made of them so confined, that neither the private inquirer nor the administration have hitherto been able to derive the least utility from them. The author of this beneficial practice was

the emperor Peter the great, who, so long ago as the year 1722, (a time when very few countries had as yet adopted that method,) by an article of the supplement to his new ecclesiastical regulations, ordained that the clergy should deliver to their archhiereysevery four months an account of the number of the births and deaths in their several parishes. This command was, two years afterwards, again enforced and enlarged, accompanied with prescribed forms of the manner in which these tables were to be drawn up. In the year 1726 an order was issued directed to the clergy to transmit duplicates of these lists to the synod and to the college of war, which departments were to make out from them a general table, and lay it before the monarch. — With the reign of Catharine the second a new epocha began, as in many other matters, so also as to the political arithmetic of Russia. The late M. Busching, being then preacher at one of the lutheran churches in St. Petersburg, began about that period to collect, and in the year 1764 to have lists of the births and deaths of the foreign congregations of that city printed. About the same time, at the instigation of professor Schloetzer, then at St. Petersburg, and the late privy counsellor Taubert, all the congregations of the residence were enjoined to prepare lists of their marriages, births, and deaths, in tables after a stated form, and send them to the academy of sciences; like orders were afterwards issued to the german governments,

ments, directed to the several consistories, to deliver their accounts to the magistracy of the place. The last remarkable step in this business was effected by the patriotic example of lieutenant-general count Sievers, who in the year 1768, being governor of Novgorod, caused yearly lists to be made out of the betrothings, births, and deaths, in his government, and transmitted them to the senate; whereupon the then general procureur, prince Vaïsemskoy, ordered by writ all the governors throughout the empire to procure similar lists, and send them to the senate*.

This method then has subsisted in Russia upwards of seventy years. The benefit arising from it during this long period has been, however, proportionately but very insignificant, which partly proceeds from the incomplete construction of the tables, and partly from the negligent use that appears to be made of them. All the lists, those of St. Petersburg excepted, have very material chasms; in the deaths of the female sex the age is seldom noted; the diseases and casualties are neither completely inserted nor scientifically classified. The direction of these lists is indeed committed to the clergy; but whether they are made out by them everywhere with due precision, and whether many particulars, especially in the rubrics of the bills of mortality, may not be unknown even to the priests, is liable

* Hermann's Beytrage, vol. ii. p. 1. — Schlœtzer von der unschadlichkeit der pokken in Rußland, und von Rußlands bevölkerung überhaupt, p. 65 und 144.

to more than ordinary doubt. — Notwithstanding all these defects, however, the tables have their proportionate use if but industriously employed, and with attention to practical application. The senate receives them according to the governments, which undoubtedly is the best method for enabling them to be consolidated, as the revision-lists are likewise composed by governments and their circles. The synod obtains them according to eparchies, but only of the professors of the russian church; they are in like manner communicated to the college of war, which principally pays attention to the male sex. The academy receives only the lists of the city of St. Petersburg, but these probably more complete and accurate than they are elsewhere kept; this department is accordingly the only one that has hitherto made an adequate public use of them. The public is indebted to this learned society, besides the forementioned paper of professor Schloetzer's, for two excellent dissertations *, from which, particularly the former, we shall select the necessary directions in our investigations on the same subject.

The lists which we may here take for the ground to proceed upon, are indeed only of one single

* Essai sur les tables des mariages, &c. de St. Petersbourg, depuis 1764—1780, par M. Krafft. Acta acad. Petrop. ann. 1782, pars i. — Mémoire i. depuis 1781—1785. Nova acta, tom. iv. — Mémoire iii. depuis 1786—1790. Nova acta, tom. viii. — Mémoire sur les naissances, mariages et morts dans quelques provinces et villes de la Russie, par M. Hermann, Nova acta, tom. iv.

year (1793), but they extend over nine eparchies, which, with the government of Riga, the particular tables whereof are now lying before us, comprehend together fifteen governments, which, in regard to their situation, their physical properties, and their civilization, are extremely various, and therefore present very different, and thereby the more remarkable results *. According to these data we will inquire into the particular relations of fruitfulness and mortality, without insisting on the premises, the dryness of which would be wearisome to the generality of readers, and which may be consulted by the curious in the sources to which we refer.

All increment in people depends on the proportion of fertility and mortality, from whence proceeds the superiority of the births to the deaths or the progress of population. In order to judge of the FERTILITY of the inhabitants of a country, we should know how many marriages are contracted annually among the whole number of the people there, how many children we may venture to allow

* Namely, the governments of Tula, Mosco, Kostroma, Vologda, Nishney-Novgorod, Riasan, Yaroslaf, Viatka, Perme, Tambof, Pensa, Saratof, Kazan, Simbirk, and Riga. Six of these governments lie in the northern, the rest in the middle tract, and they all belong to european Russia. According to the forementioned classes of population two of them are to be reckoned to the first, as many to the second, six to the third, four to the fourth, and one to the last.

to every new marriage, and what proportion the births bear to the living. — The first question is only to be answered indefinitely in general terms, it being well known that in cities and towns fewer people marry than in the country. In the said fifteen governments the proportion of the marriages to the living was on an average as one to ninety-two, that is, among ninety-two persons one marriage was contracted, or of forty-six people one married. This proportion is extremely favourable to population; in Sweden, for example, it is computed that during a period of fourteen years among a hundred and ten, in Denmark among a hundred and fifteen, and in Norway even among a hundred and thirty persons, only one marriage takes place. In the cities and great towns of the empire naturally it cannot be so advantageous, as there the introduction of luxury and the disproportion of the two sexes are difficulties in the way of marriage; thus at St. Petersburg of seventy persons annually one marries.

To one hundred new-contracted marriages, we are to reckon, according to our lists, upon an average three hundred and sixty-two children. This is about the mean proportion admitted for the whole country, where it is usual to reckon four children to a marriage*. This fertility, however, is not very great; in Sweden, for example, a hundred marriages yield four hundred and ten, in the

* Frank's System der medizinischen Polizey, vol. i. p. 396.

prussian

prussian territories four hundred and sixty-eight, in Silesia five hundred and three children. Even in certain districts and towns of the russian empire this proportion is more favourable to population: in St. Petersburg, for instance, to a hundred marriages are computed four hundred and twenty-nine children.

The proportion of the births to the living is in general as one to twenty-six, or of twenty-six living persons one is born. In large towns this proportion is admitted as one to thirty, in smaller as one to twenty-four, and in the country as one to twenty-two; the mean proportion is, therefore, as one to twenty-seven, and it is seen how very near the result of our lists comes to it. On the whole this fertility is considerable enough, as it is rarely found to be greater in large states. In the prussian, for example, upon an average of eleven years, the same proportion holds good; whereas in Silesia and some provinces of Holland and France, it is by far more advantageous*. — If we compute for the whole mass of people throughout the russian empire, that of twenty-six living persons one is born; it follows, that, of the thirty-six millions of inhabitants annually about 1,385,000 persons are born.

The general agreement of the birth-lists of all countries has farther shewn, that of every great number of children more boys are born than girls,

* Sußmilch's gottl. ordnung, part i. sect. 116.

in the proportion of a hundred and five to a hundred. Our lists likewise confirm this interesting observation, but they yield a far more sensible proportion: according to them a hundred girls are born to a hundred and twenty-two boys. This result seems to corroborate the hypothesis of the academician Hermann, that the surplus of the new-born boys is the largest precisely in the best and most fertile provinces of the russian empire; and that, consequently, climate, good circumstances, and luxury, must have a remarkable influence on the procreation of boys. — If the above proportion be applicable to the whole mass of people, it will follow, that Russia, in the annual number of its births, has 761,000 boys and only 624,000 girls.

The quantum of MORTALITY arises from the proportion of the deaths to the living; and this by our lists is as one to fifty-eight; a proportion which in all the countries of Europe is hitherto without example, and would justify the most extraordinary expectations in favour of the progress of population, if the credibility of the bills of mortality could be placed out of doubt. As so small a mortality, however, militates so much against common experience, we may reasonably venture to bring them under suspicion. In the prussian states one annually dies out of thirty-two living, in Denmark one out of thirty-seven, in Norway one out of forty-eight; is it easily conceivable that this last uncommonly favourable proportion could be everywhere so greatly exceeded

ceeded in an empire of such a prodigious extent as Russia, and that in the greatest diversities of soil, climate, way of life, and even the national constitution of its inhabitants? From these and several other considerations it is probable that the bills of mortality are not so accurately and fully made out as the lists of births; in these there is scarcely the omission of any new-born child, as it is entered in the baptismal register: but how many people, and particularly children, are buried in the country without any priestly ceremonies, and how great the number of those who die in wars, on sea-voyages, in hospitals, and in prisons *, or lose their lives by means unknown, or avoid the bills of mortality of their parish by emigration. — Notwithstanding this, the agreement of all the mortality-tables of so many years and such a variety of districts is a curious circumstance; and from what we are able to deduce from the result of them in behalf of the foregoing

* That the last, notwithstanding the imperial orders, have still no article allotted to them in the bills of mortality, may be seen in several passages of the before-mentioned tract of professor Krafft. Il seroit à désirer (says he in the second memoir, *Nova acta*, tom. iv. p. 205.) pour le bien de l'humanité, que les tables continssent un registre des morts arrivées dans les hôpitaux et les prisons, et surtout un exposé des genres des maladies; l'ordre impérial en fait une expresse mention. And in the third: (*Nova acta*, tom. viii. p. 255.) La publicité à l'égard des nombres annuels des morts arrivées dans les maisons des enfans trouvés, dans les hôpitaux et les prisons intéresse trop l'humanité pour ne pas désirer, aussi l'ordre impérial en fait, je le repète, une expresse mention.

observations,

observations, it appears undeniable that the mortality in Russia, as well as in other northern countries, must be proportionately smaller than the political arithmetic in general is wont to admit. In confirmation of this assertion we may appeal to the bills of mortality of St. Petersburg, the credibility whereof is attested by the complete harmony of their results with the laws of nature, and has been competently evinced by the learned and sagacious investigations of the academician Krafft. From these lists it appears that the proportion of the dead to the living, in three successive periods, comprising the interval from 1764 to 1790, was as one to thirty-five, as one to thirty-seven, and in the last period, when epidemical diseases operated, as one to twenty-nine. The two first proportions are unparalleled for a city so large, populous, and luxurious, as it is usual to admit, in general, for the mortality of the open country only $\frac{1}{38}$, and as it has been shewn that in great cities, ex. gr. in London and Rome, it amounts to $\frac{1}{24}$ *. — Without therefore, pretending to decide in this matter, we will adhere to the result of our lists, according to which the whole mortality carries off yearly 623,000 persons.

The proportion of the deaths of males to those of females is as a hundred and five to a hundred; the russian empire, therefore, loses annually of the former 320,000, and of the latter only 303,000

* Süssmilch's gottl. ordnung, part i. sect. 35.

persons. On comparing this statement with the proportion of the births of the two sexes, it appears as though in most parts of the Russian empire not so many persons of the male sex proportionately die as boys are born, and that consequently in many provinces there must be a considerable surplus of males to females. This remark has been actually verified in particular governments by enumerations *, and, if it could be proved of the rest likewise, would at the same time afford a proof (without making a question of decorum) that Russia is the last country in the world that could favour Mohammedanism. But it is probable, that the inferior

* According to statements which are produced in the "Statistische uebersicht des russischen reichs," there are in the governments of

	Males.	Females.
St. Petersburg - - - - -	315,431	262,386
Vyborg - - - - -	89,637	87,167
Kharkof - - - - -	402,434	394,374
Kaluga - - - - -	393,108	377,739
Tambof - - - - -	443,660	435,904, &c.

On the other hand, however, there are several governments in which the female sex is the most numerous.

	Males.	Females.
Olonetz - - - - -	111,681	115,285
Riga - - - - -	262,853	264,029
Reval - - - - -	97,155	99,130
Yaroslaf - - - - -	373,296	393,143
Mosco (excl. of the capital)	394,374	417,872, &c.

mortality

mortality of the male sex, at least in so striking a proportion, is not in the nature of the case, but only appears to be so in the bills of mortality, as that sex is principally exposed to those kinds of death which have a rubric in the lists.

As the tables on which these calculations are grounded express neither the age nor the diseases of the deceased, many important results cannot be obtained which otherwise might be drawn from these proportions. To supply, however, in some sort this defect, we will at least follow the bills of mortality of St. Petersburg, the results whereof may perhaps be applicable, with due restrictions, to the empire at large.

Of a thousand new-born children in St. Petersburg about five are still-born; a proportion so small as not to be paralleled anywhere. The veracity of the lists cannot well be called in question, as the fact can be proved by other means; and the proportion of the still-born children of both sexes exactly tallies with that of other countries: there are here, as well as almost everywhere, of a thousand boys nine still-born, but of the same number of girls only five. These lists moreover shew, that among the foreigners settled in St. Petersburg, of a thousand births twenty-five are still-born, and therefore five times more than among the Russians. — With far better reason may this favourable appearance be explained from the robust constitution of the Russian mothers and the frequent use
of

of the hot baths. Both nature and their manner of life are so propitious to the russian-women, that of a thousand lying-in only seven die, whereas of the same number of foreigners in St. Petersburg fifteen lose their lives in child-bed.

If we admit this proportion for the whole amount of births in the russian empire, (and with what shew of reason could it be affirmed that it must fare worse with people in the country and in small towns?) then the advantage is plain that the population receives from the vigour and happy organization of the female sex. Of the sum total of one million three hundred and eighty-fivethousand births, according to this proportion, only six thousand nine hundred and twenty are still-born children; but if the proportion were as with the foreigners at St. Petersburg, then would the number of them amount to thirty-four thousand six hundred; consequently the country would lose upwards of twenty-seven thousand more citizens, at their very entrance into the world, than probably its loss amounts to by the present proportion.

At St. Petersburg of a thousand children on an average a hundred and eighty-four die in the first year of their age. This mortality likewise is extremely small for so large a city: in Berlin, for instance, in this period two hundred and seventy-six die, in London three hundred and twenty, and even for the open country, the deaths are generally reckoned at not fewer than two hundred and eleven. If this proportion be so favourable in the residence,
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it must be far more advantageous in the provinces, where the mothers suckle their children; we shall therefore probably not fall into an error, if we apply it in general to the whole population. The result therefrom would be, that Russia, of the whole yearly amount of her births, loses two hundred and fifty-five thousand in the first year of their age.

Of a thousand children that are one year old, eight hundred and nine attain to their fifteenth year; but a hundred and ninety-one die during that period of life. The loss to the state amounts in the whole therefore to about two hundred and sixteen thousand children; and at the end of the fifteenth year it has still nine hundred and fourteen thousand youths and girls remaining, who enter on their prime of life with full vigour.

The greater however the hopes which so extraordinarily great a vitality may justify, so much the more unexpected is the lamentable result produced by the succeeding period of life. From the twentieth to the sixtieth year there die in St. Petersburg of a thousand persons eight hundred and seventeen; of a thousand persons at the age of twenty consequently no more than a hundred and eighty-three can cherish the hope of reaching to so short a term. Therefore, during this period of an equal number there die two hundred and seventy-three more persons than generally in other countries, and ninety-seven more than even in London, which exceeds

exceeds all great cities in the number of its * deaths. So striking and remarkable a phænomenon as this, makes it incumbent upon us to endeavour to trace out its cause.

The source of this tremendous mortality cannot possibly be in nature, as it suddenly appears after an extraordinarily great vitality. If the bodily constitution of the people, or the physical quality of the country had any influence on it, its effects would be principally seen in the tender period of life which is everywhere liable to a greater mortality; but here exactly the reverse appears among the Russians, as we have made apparent by drawing comparisons with other countries. The source of the evil then must be non-natural; it must be in the manner of living. The bills of mortality, alas! leave no room to doubt it; they teach us, that this great mortality chiefly relates to the male sex, and that it is principally occasioned by fevers and consumptions, that is, by diseases brought on by the intemperate use of strong liquors.

It is to brandy then that we must lay all the blame of this terrible effect. In order to simplify in numbers the loss sustained by the country in its human-capital through the means of this pernicious liquor, let us admit, that the mortality, from the fifteenth to the twentieth year, observes the same proportion which holds good in general from the

* Sussmilch, tom. ii. p. 348.

birth to the fifteenth year; at the end of the twentieth year then the total of the deaths amounts to six hundred and twenty-eight thousand, and the state retains still seven hundred and fifty-seven thousand young citizens remaining, which may become useful members of society from that period by their industry and by the propagation of their species. Of this noble capital, in the most valuable period of life not less than six hundred and eighteen thousand individuals perish, and of the whole sum of all the births at the conclusion of the sixtieth year only one hundred and thirty-nine thousand persons remain, who from their temperance or greater strength of constitution may hope to attain to a more advanced age. If, on the other hand, the mortality during this period observed the same proportion which it usually does in other countries, then would the loss at the end of it amount only to four hundred and twelve thousand persons, and consequently two hundred and six thousand more persons sixty years old would be still alive, who at present by their intemperance have been prematurely carried off.

After this remark we naturally can expect only a small number of aged people. In St. Petersburg of a thousand births no more than three attain the age of ninety; whereas, in the ordinary course of nature, nine ought to arrive at that venerable term. If this proportion may be applied to the whole, then, of all the births, at the end of the ninetieth year
only

only four thousand two hundred would be left, of whom however several might entertain the hope of reaching a very advanced age. — From our lists it appears that one out of eighty-five deaths had lived more than a hundred years; three out of that number were so fortunate as to extend their life to a hundred and twenty years.

The rubric of diseases is entirely omitted in these bills of mortality; and even in those of St. Petersburg it is so incomplete and erroneous, that the academical commentary upon it can only produce very unsatisfactory results. It is much to be wished that the lists were improved in this respect. An accurate and well-classified statement of the diseases of all the departed in the various regions of so vast an empire would furnish materials for a medical topography, which, from the great diversity of the soil and climate and the nations themselves, must prove extremely important to the natural history of mankind; and by the comparison of the several data with each other and with the general laws of nature, might point out to government the best methods to be adopted for preserving its people. — As these ideas, however, are at present only pious wishes, we will at least communicate the scanty harvest we have been able to reap from this profitable but hitherto so little cultivated a field.

The greatest mortality of St. Petersburg is caused by the three following classes of disease: fever, pleurisy, and consumption. They attack the male sex more frequently than the female, and together

carry off the half of all that die. As these diseases can hardly be ascribed to local circumstances, but most probably take their rise from the way of living of the great mass of people, we may suppose their fatal effects to be in a like proportion in other parts and in entire provinces. — On the other hand the diseases of children, e. gr. convulsions, teeth, small-pox, measles, are in St. Petersburg (and probably also in the greater part of Russia) far less fatal than elsewhere. Convulsions, which commit the most ravages, carry off the twenty-fourth part of all the births; but in other countries they are far more destructive. — Before the introduction of inoculation, the natural small-pox killed $\frac{1}{31}$ of all that were born; since that epocha $\frac{1}{38}$. From this remark arise two weighty consequences: One, that this formidable disease is not so malignant in Russia as in other countries, where on an average it carries off $\frac{1}{14}$ of the births*; and, secondly, that the beneficial practice of inoculation, even in the residence, is by no means general, because in that case

* The question whether the small-pox be proportionably more innoxious in Russia than in other countries, has given rise to two very interesting writings we shall more than once have occasion to quote: professor Schlœtzer's before-mentioned treatise on the innoxiousness of the small-pox in Russia, and pastor Grot's supplement to his sermons on inoculation, "On the fatal effects of the small-pox in St. Petersburg, as relative to the question concerning the innoxiousness of that disorder in Russia." Schlœtzer, who declares for the affirmative, supports his argument on the ten monthly lists of deaths at St. Petersburg for the year 1764, and

case the mortality must have greatly diminished, as by universal experience we find that of the inoculated only three die out of a thousand.

Lastly,

on the declaration of some students who belong to the houses in various parts of Russia. This testimony, as well as the assertion itself, Grot undertakes to refute; and in fact truth seems to incline to his side. At least among all the nomadic nations of the Russian empire, the small-pox, according to the most credible evidences, are incomparably more fatal than in the European states. Their prevalence indeed is not continual; but, when they once begin anywhere to rage, their ravages are the more dreadful. They observe periods, returning after ten, twenty, or thirty years; but their less frequent appearance has no influence to the diminution of their mortality. All that the population seems to gain in any of these intervals, is perhaps lost to a double amount by the havoc committed by the contagion at its return. The easy access which inoculation found among the Siberian nations, affords a fresh probable argument in behalf of the great mortality of the small-pox there. Nothing but great and almost inevitable danger could have prompted unenlightened nomades in such numerous multitudes to the use of a remedy, which on one side was so strongly recommended to them by the natural instinct of self-preservation; and on the other side promised a safeguard to the lives of their children not to be expected from any other quarter. — The mortality of the small-pox, continues Grot in his dissertations, to the native Russians, may perhaps be less, but perhaps also greater. To adopt as general the proportion admitted from the tables of St. Petersburg, is too hazardous. How easily may causes unknown to us, arising either from the difference of climate, of the atmosphere, of the weather, of bodily frame, or that are entirely independent on them, give the preponderance to one side or the other! — The consentaneous experiences of whole countries and nations are in favour of the ordinary degree of their mortality, as well as the frequent and sudden

Lastly, from the several proportions we have now adduced of the fertility and mortality, is seen the ratio of the progress of population, or the space of time requisite for the mass of the people to double itself. This ratio is apparent both from the proportion of the general fertility and mortality to the whole number of the living, and from the surplus of the births to the deaths. On this matter the lists before us, after what has been premised, yield the following result:

The ratio of the general fertility is $\frac{1}{28}$;
consequently the number of the annual births out of thirty-six millions amounts to - - - - - 1,385,000

The ratio of the general mortality is $\frac{1}{58}$;
consequently the number of the annual deaths out of thirty-six millions amounts to - - - - - 623,000

The surplus of the births, or the yearly increase of the population, is therefore - - - - - 762,000

conversion of the mild into the malignant sort, their no less frequent and sudden propagation, the danger which is even connected with the mode of their infection, and is only to be mitigated by inoculation, and the general laws of mortality in regard to each particular disease. An inferior mortality is an exception; and so long as this is not shewn by numbers, so long shall we have only uncertain conjectures in behalf of an appearance which deviates so much from the ordinary course of nature." Sermons on inoculation of the small-pox, p. 431.

Accord-

Accordingly the proportion of the births to the deaths is as two hundred and twenty-five to a hundred ; or of a hundred that are born, forty-four or forty-five die. The population therefore is annually increased by about $\frac{1}{49}$, or is doubled within forty-nine years.

This astonishing increase of the population may perhaps excite some doubt as to the correctness of the lists, for the credibility whereof indeed we cannot vouch ; but however extraordinary such a rapid duplication may appear, yet it is not entirely without example. If so acute and honest an inquisitor as Franklin estimates the period for this duplication in the united provinces of America at twenty-five years, why should not the russian empire, with the like and greater natural advantages, possess half as much tendency to the increase of its population ? Were we even to give all possible weight to the arguments that have above been brought against the validity of the bills of mortality, and reduce the surplus of the births to half a million ; still the result will far exceed the experiments that have been made in the generality of european countries on the increase of population.

If these observations prove not unwelcome to the philosophical inquirer ; if they afford government any suggestions on the most important of all political concerns : it is then worth while to complete the means for rendering these useful calculations practicable. — “ Well-made lists of births and
N N 3 “ deaths,”

“ deaths,” says the author of the learned tract to
 which we are indebted for several of the interesting
 statements in this section *, “ present to us the
 “ influence of physical and political circumstances
 “ on the well-being of the people, in plain arith-
 “ metical expression ; they are a sort of political
 “ thermometer to the rulers of states, pointing
 “ out to them the degree, even the lowest, of the
 “ declension of the prosperity of their people ;
 “ they are the incorruptible organ, which reduces
 “ the public exigencies to language, and conse-
 “ quently points out to sovereigns the surest means
 “ of diffusing content and happiness over millions
 “ of mankind. But, great as their utility is when
 “ they bear the stamp of truth, so dangerous are
 “ they when they deviate from that standard, or
 “ are falsified by imposture to mislead the judgment
 “ of well-meaning princes !”

Since the former edition of this work, a respec-
 table german periodical publication gives the fol-
 lowing table of all the births, deaths, and marriages
 in 1799, throughout the russian empire in the greek
 church, as being faithfully extracted from the gene-
 ral returns, received by the synod, and containing
 all the eparchies, except that of Bruzlau ; which,
 from the peculiar difficulties in forming a correct
 list of mortality in that eparchy, could not be inserted.

* Krafft, Mémoire i. Acta Petropolitana for the year 1782,
 part i. p. 65.

Names

Names of the eparchies.	Births.		Deaths.		Marriages. Couples.
	Males.	Females.	Males.	Females.	
Kief	25,252	23,793	16,372	16,164	10,279
Novgorod and the vicariate of Staraya Russia	9,320	8,234	4,474	4,249	4,383
Mosko	27,394	22,235	13,238	12,131	13,151
St. Petersburg	9,527	8,702	8,460	5,508	4,358
Kazan	23,391	20,286	12,889	11,486	13,263
Astrakhan	6,308	5,074	3,041	2,337	3,044
Tobolsk	28,206	26,847	14,444	13,054	12,166
Rostof	10,854	9,798	5,830	5,413	0,281
Pskove	7,220	5,898	4,011	3,412	4,100
Riazan	17,732	14,726	5,316	5,148	8,509
Tver	15,569	12,928	5,858	5,703	7,373
New Russia	26,319	24,731	16,785	15,414	14,615
Tschernigof	33,046	30,603	21,838	20,975	17,162
White Russia	10,094	9,209	7,589	7,281	5,537
Minsk	2,915	2,577	1,705	1,647	1,538
Smolensk	21,977	20,243	13,261	13,522	9,313
Nishegorod	20,173	16,664	10,031	9,422	9,554
Bielgorod	46,301	39,364	23,523	22,350	20,333
Suzdal	12,771	10,315	5,380	5,187	7,284
Vologda	11,024	9,506	5,912	5,644	4,928
Kolomna	21,703	17,135	6,628	6,204	9,676
Viatka	23,959	25,219	14,655	13,791	13,407
Archangel	7,104	6,271	4,427	4,236	3,457
Voronetsh	27,154	22,901	10,406	9,198	12,764
Irkutsk	4,830	4,650	3,450	2,828	2,239
Kostroma	10,112	7,396	4,410	4,253	5,776
Tambof	22,133	16,667	7,401	6,667	11,784
Orel	27,373	11,835	6,445	5,799	6,900
<i>Vicariates.</i>					
Mosdok	1,078	971	1,231	754	608
Feodosia	797	704	681	532	515
Dmitrof	12,883	13,327	7,933	7,324	6,387
Pereiyaslavl	12,191	11,791	7,879	7,539	6,329
Sum total	531,015	460,900	275,582	264,807	257,513
Grand total	991,915		540,390		257,513
Overplus of births	Males 255,432 Females 196,093				
Sum total	451,525				

This uncommon overplus of births, unparalleled in the annals of political oeconomy, forms a characteristic feature of the russian empire, and is an evident proof of the increasing prosperity of the inhabitants of its vast dominions. If this immense increase of population should proceed in the same progression for ten years, at the expiration of that term the number of russian subjects will be increased by five millions.

Another striking object is the uncommonly favourable proportion which the males bear to the females, and which seems intended by nature as the foundation of the military grandeur of the russian empire. It appears from the above table that upwards of twenty-three boys were born to twenty girls; while, on the other hand, the decease of the male sex exceeded that of the female but by a trifle; a hundred and four persons of the former having died to a hundred of the latter.

The most important result of the above table, is the amount of the present population of the russian empire, which may be inferred from it with a tolerable degree of arithmetical rectitude. It is well known that the mortality is in common years throughout all the russian dominions, as one to fifty-eight, by which calculation the number of russian subjects of the greek church would amount at present, exclusively of the inhabitants of the eparchy of Bruzlaw, to 31,339,620 souls. If to this number be added that of the inhabitants of the
new

new possessions in Poland, which in 1795 contained 4,592,544 souls; and if all other russian subjects of the various christian sects, and of the jewish, laman, and schaman professions, who are known to be very numerous, be moderately estimated only at five millions; the population of the russian empire amounts in the whole to upwards of *forty millions* of souls*.

SECTION II.

Public Institutions for the Preservation and Increase of the Population.

HAVING seen how benignly the increase of the stock of people is provided for by Nature, it is now time to inquire how far the government has been attentive to that important object.

The means which the state may employ to this end are of two kinds: either positive, whereby the population is actually, directly, or mediately augmented; or negative, by which depopulation is prevented.

* Professor Storch, in his excellent, "Historico statistical picture of the russian empire at the end of the eighteenth century," rates the population of the russian dominions in the whole at thirty-six millions of souls. But he was not in possession of the exact population-table here given; and, of consequence, not correctly informed of the enormous increase of the vast population of the russian empire.

How great soever the activity may be with which Nature everywhere operates to the increase of mankind, not less destructive are the impediments to her grand and maternal views. But few of our species attain to that period of life which Nature has assigned, not to individuals, but to the whole human race: one half of mankind wither in their early bloom. — According to the calculations which we have just laid before our readers, it is more than probable that the russian empire loses, of the annual growth of its population above six hundred and twenty-eight thousand of all that are born, before they reach their twentieth year, of whom a very great part fall innocent victims to ignorance, to superstition, to negligence, and to the moral depravity of their parents and nurses. Were it possible only in some degree to stop the sources of this dreadful loss, and only to rescue the twentieth part of this slaughtered generation, the state would receive a pure gain every year of more than thirty-one thousand human beings, which would be precisely as if it were enriched by thirty-one thousand new citizens.

But, it will be asked, is it not Nature herself who allots to the greater part of the race of men so short a term, and destroys the half of her own work ere it has reached maturity? — Certainly Nature, for wise and good purposes, has made the first period of human life dependent on the nursing and care of others, and the whole of its physical existence on a
thousand

thousand accidental circumstances ; but no less certain is it, that man is his own destroyer, and that the physical and moral corruption of large societies begets numberless new evils, the origin whereof can never be charged on Nature. If, for example, by well-attested observations, of a thousand children nourished by their mothers, only three hundred died ; but of just the same number who are suckled by nurses five hundred are a prey to death : — if the natural small-pox kill the seventh child, while of the inoculated only three out of a thousand lose their lives : — if London formerly lost only a tenth of its births by convulsions ; but at present, since it is become larger, more opulent and more luxurious, its loss is risen to three tenths : — if in Russia annually two hundred thousand grown persons are brought prematurely into the bills of mortality by the immoderate use of strong liquors : this surely is not the fault of Nature, who neither teaches us to keep nurses nor to drink brandy, and who, if we follow her simple and beneficent dictates, renders even mortal distempers innoxious.

Unquestionable as it is that the generality of physical evils proceed from man himself, not less so is it that he has the eradication or the mitigation of them in his own power. The care of his own preservation is implanted as an instinct in the breast of each individual, which only needs some understanding and conduct in order to reach its end : in civil society the care for the preservation of all is a duty incumbent

incumbent on the state *, and requires to be supported with so much the greater energy the more its strength and welfare are dependent on that care. No one will make it a matter of doubt, that a wise and vigilant government possesses great and powerful means to check the mortality of its subjects ; and of what may be effected in this regard by public institutions, history affords us instructive and striking examples. Famine, pestilence, leprosy, and small-pox have formerly depopulated whole provinces ; but corn-magazines, lazarets, and inoculation-houses have gradually set bounds to their devastations ; and, if these horrible calamities still at times rage in other quarters of the world, yet the citizen of Europe is secured from their farther dissemination.

From the following representation it will appear how much in Russia the government has hitherto done in this important part of public concern. A country in which most of the institutions of this kind are of a new creation, and where the people live dispersed over a monstrous surface, great difficulties naturally present themselves to the provisions that may be undertaken for preserving the numbers and the health of the inhabitants. This remark, which perhaps to some readers will not appear superfluous, will place us in the true point of view,

* Instruction of Catharine II. to the commission for framing a code of laws. cap. xii. sect. 267.

for forming an impartial judgment on the establishments and measures, which are at present the object of our attention *.

Medicine, as a science, was not domesticated in Russia till the commencement of the eighteenth century. For though before that period foreign physicians were individually maintained at the court of the tzars; yet public medical institutions were unknown to the empire. Peter the great first called expert physicians and surgeons, erected hospitals and endowed a MEDICAL CHANCERY or faculty, which had the supervisal of the whole state of medicine, committing to it the care of its foundation and enlargement. The favourite physician of that emperor was Blumentrost, a German, born at Mosco, who, afterwards, as president of the academy of sciences, was also director of the medical faculty, and as well under that sovereign as the two following enjoyed the place of archiater. With him Peter the great had another physician, Dr. Areskine, of Scotland, but who was thought, under cover of this post, to act ministerially as agent from the scottish jacobites. — During the reign of the empress Anna, besides these two physicians, Krugar and Fischer, with the famous Ernest Stahl, were invited

* Many of these particulars are from a manuscript written by the late baron Asch, senior member of the medical college, and another by Dr. Ellisen; but for the friendly communication of which it would have been almost impossible to have drawn up any account of these matters, as little or nothing has hitherto been published in Russia on what may be called medical statistics.

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from Berlin to St. Petersburg, who, however, after a short stay, quitted the residence and returned to Berlin. — Elizabeth conferred the post of archiater on the physician Lestocq so celebrated in the history of her reign; and about the same time Ribeiro Sanchez came to Russia, on whose recommendation also Kaau Boerhaave was invited thither. Panaiota Kondoidi, from the island of Corfu, was then president of the medical chancery, a man of talents and great sagacity, who first published the regulation of the college of medicine.

On the death of Kondoidi in the year 1760, the direction of the medicine chancery was committed to three of the most eminent physicians, whose function, however, shortly afterwards became extinct, in consequence of the erection by Catharine II. in 1763 of the IMPERIAL MEDICAL COLLEGE, whose foundation forms a new and important epocha in the history of physic in Russia*.

Much has been done since the time of Peter the great to advance the knowledge of the healing art by the founding of hospitals, establishing of apothekes, inviting of foreign physicians, &c.; but

* Ukase of the 12th of November 1763, relating to the founding of the medic. imp. coll. Poissonniere and Le Clerc, french physicians, were of the number of those invited into Russia, the latter of whom was the author of several works, as, "Medicus veri amator, ad artis alumnos, 1764." "Histoire naturelle de l'homme malade," 2 vols. 8vo. "Histoire de Russie." "Atlas du commerce national." It was he too who directed the establishment of the Pavlofsky hospital, as it subsists at present.

the mode of proceeding has been defective, and not conducted on any regular plan. The supervisal of the whole state of physic was one while committed to the chancery, then to one sole chief, and it rarely happened that one and the same direction continued long enough to produce any lasting benefit, as it was the uniform practice of the successor to destroy what the former had been doing. It was owing to this state of things that Russia, during a space of more than sixty years, has been able to produce from the nation but very few skilful physicians and surgeons, and that amongst several expert and deserving foreigners it has been pestered with so many half-learned and ignorant physicians; besides, in the interior and remoter provinces there was still a great want of proper medical institutions.

In order to remedy this defect, and put the whole police-of-health, which forms so important and essential a branch of the general administration, under one sole, powerful, and effective direction, Catharine created the medical imperial college, delivering to it at the same time a definite and express instruction. "Two things," says this memorial, "the college are to make their principal object: "to preserve the people of the empire by the arts "of medicine, to educate russian doctors, surgeons, "operators, and apothecaries, and in the next place "to put the apothekes and their œconomy on a "good footing *." — The plan of the present work

* Instruction of the college and its members.

being

being too confined to allow of a greater prolixity in regard to the methods it was found necessary to adopt for the attainment of these views, we can only here give a very general sketch of the diligence and the present state of this department.

To the college-establishment belong, besides the director in chief and the presidents, (which places are usually filled by persons of elevated rank,) four doctors as members, who are accounted of the sixth class, or have the rank of college-counsellors, of whom one has the care of the correspondence as the learned secretary; farther, a chief-surgeon, who belongs to the seventh, an operator and an apothecary, belonging to the eighth class. Besides, they have several other secretaries, translators, and writers appointed by themselves. In connection with the college is the œconomical chancery and the revision-office, which however have neither seat nor voice in the college. — The personal salaries altogether amount to the yearly sum of 19,150 rubles.

This college has a department in Mosco, whose president for the time being is city-physician, and which costs annually in salaries four thousand rubles:

The revenue of the college arises principally from the three following articles: 1. A per centage on the pay of all civil and military officers, who, in return, (but not their families,) are attended by physicians and provided with medicines gratis. 2. The profit on the sale of medicines to the public. This part of their income, however, is constantly declining by
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the competition of private apothekes. 3. Moreover, the college receives annually an addition of 470,000 rubles, whereof 120,000 are paid out of the imperial treasury*.

The disbursements for the college establishments and its dependencies, but without the governments, physicians, and hospitals, amount annually to 114,760 rubles.

The sphere of this imperial college extends over the whole body of physic, and all medical persons throughout, excepting only the medical establishment of the court. It is its duty to see that all the governments and circles are provided with the requisite physicians, surgeons, and apothecaries according to the imperial precept; it watches over the observance of the duties of every individual under its direction, and has inherently the power to reward and to punish. It has the inspection over the management of the apothekes belonging to the crown, over the hospitals and medical seminaries of education. It examines all physicians, surgeons, and operators before they can be permitted to practise in the empire, from which even academical testimonies and degrees will not exempt, and publishes in the Gazette the names of the persons to whom that permission is granted. It is competent to confer the degree of doctor in medicine. It has

* Ukase of June 2, 1794. — In the years 1794 and 1795 the arrears due to it from the college of war and the admiralty were liquidated by the sum of 530,000 rubles.

to do in general with whatever belongs to the medical system, and its correlative institutions. Accordingly it holds a regular correspondence with all the provinces of the empire, for obtaining information concerning the state of the national health. On learning that some infectious distemper has anywhere made its appearance, it loses no time in adopting the proper means for stopping its progress. Lastly, it attends to the improvement of the healing art in general; and to this end collects the cases transmitted by the several physicians of the empire, and publishes them from time to time in the latin language. — The medical department in Mosco co-operates with it to these purposes, only with the limitation that it is dependent on the college, and can neither appoint physicians nor prohibit them from practising.

The sphere of action of the medical college being so important and so extensive, it cannot be expected that we should here give the history of it from its foundation. We shall content ourselves with producing a few instances of the manner in which this learned establishment has endeavoured to accomplish the design of its erection.

They have published a *Pharmacopœia Rossica*, which first appeared in the year 1778; regulations concerning apothecaries, midwives, with the fees that are to be taken by them as well as by physicians and surgeons, in 1789, in latin, russ, and german. — The college in 1765 employed for the first

first time the imperial authority of creating doctors, by conferring their diploma on the chevalier Orræus, who had studied in Kœnigsberg, but before he could be promoted was called home. They made it their principal business to form young physicians and surgeons from the natives, the want of whom was very sensibly felt in the interior provinces, and by encouragements and rewards brought out several good medical translations as well as original writings. — For supplying the army, the navy, and the hospitals with chirurgical instruments, the college erected three workshops, in St. Petersburg, Mosco, and Tobolsk, of which the first is the best. As the college spares no expences for causing russian pupils to be instructed by the most skilful foreign artists that can be procured, the empire is now in possession of a sufficient number of its own instrument-makers, whose work is but little inferior to the best of what comes from abroad. The salaries paid at these shops amount annually in St. Petersburg to three thousand, and at Mosco to seventeen hundred rubles; the particular inspection over the former is committed to an operator, who is a member of the college and a native Russian. — In the year 1795 the college erected its own printing-office with a type-foundry adjoining, which has already published several works, the typographical neatness whereof does honour to the overseer. At the printing-office a very expert engraver is also maintained. — Of the other concerns of the college,

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and the advancement of the art of physic in Russia, mention will occasionally be made as we proceed.

Among the principal institutions depending on the medical college is the town-physicate, in the capital, the residence, and the chief towns, whose peculiar office it is to visit monthly the private apothekes. — The crown-apothekes are managed entirely on the account of the crown. The imperial chief-apothekes at Petersburg and Mosco provide all the rest with materials, and deliver the necessary medicines to all the public institutions, the military hospitals, &c. All officers, civil and military, receive for their own persons, free of expence, what they want from the crown-apothekes, in consideration of the fore-mentioned deduction from their pay ; the rest of the public pay according to the rates prescribed. For a long time the crown-apothekes were the only ones in being ; but during the reign of Catharine II. the number of private apothekes in the residence and some of the government-towns have so much increased, that the former have but few customers from the public. All, even foreign medicines, are not allowed to be sent out from any of the apothekes otherwise than sealed, and with a label written after a prescribed form. — St. Petersburg has at present three chief and four collateral apothekes of the crown, with ten private apothekes. The yearly salaries at the former amount to 6750 rubles. The apothecary-garden of the medical college has adjoining to it a botanical garden,

garden, and contains also the chemical laboratory for the preparation of the several medicines in the gross. Both establishments cost annually seven thousand rubles.

From this brief account of the medical college and its operation, we will proceed to describe the sanity-institutions connected with it, and which may be properly divided into two classes, the civil and the military.

Ever since the time of Peter the great there have been hospitals for the army, but medical establishments for the citizens in towns and the country people were not thought of. The prodigious compass of such an undertaking, in a country of such an extent, with the difficulties and expence that must necessarily attend it, arising from the great distance of the towns, the want of physicians, and even the manners and prejudices of the people, seemed even to render the proposal impracticable. It was reserved for the reign of Catharine II. in this matter too to set an example which will never be forgotten in the annals of russian history. In the year 1763, when the instruction for the medical college was laid before her to sign, she wrote with her own hand the following words to the seventh paragraph: "The college must likewise not forget to draw up plans in what manner hospitals are to be set up in the provinces, and to make representations to us on the subject." Shortly after she issued the order for improving the lists of births and deaths, and to transmit them to the senate and to the academy of sciences,

sciences. From several passages in the instruction to the commission for framing a code of laws, it appears that a concern for the public health incessantly occupied her active mind. In the year 1775 appeared the ordinance for new-modelling the governments; and, what till then had been thought scarcely possible, or could only have been considered as a speculation which might perhaps be realized at some very distant period, Russia received a national dispensary, extending to all the parts of this great empire, and over every class of its inhabitants, not excepting the most indigent and helpless.

By this ordinance * every government, in each of its circles, must have a physician and surgeon for the town and the circle or district, two assistant surgeons, and two pupils. According to the establishment of the government of Tver, which is annexed to the ordinance, the doctor is to have three hundred, the surgeon a hundred and forty, the assistant sixty, and the pupil thirty rubles, as their pay, which for all the eleven circles of that government makes six thousand eight hundred and twenty rubles. The pay, however, is not alike in all the governments, and particularly in the remoter ones it is much higher. These medical persons are moreover allowed to accept of fees from the private patients to whom they are called.

The difficulty in introducing the new medical constitution was how to obtain a sufficient number of

* Ordinance relating to the governments, chap. iii. sect. 70.

expert

expert physicians and surgeons ; but even this deficiency was remedied by Catharine's bounty. Many of those who had assembled in the great towns of the empire, now distributed themselves about the provinces, where, with the advantage of a settled pay, they could lay their account in receiving a considerable income from their private practice, and live proportionately much cheaper ; in order to complete their number, Dr. Zimmermann, of Hanover, had a commission to engage by way of contract physicians of Germany of well-founded reputation and practical experience. A number of useful and able foreigners accepted of this invitation, and settled, for the most part on very advantageous terms, in the Russian states. The generality of them, besides the expences of their journey, had an appointment of eight hundred rubles per ann. and the place of their abode was left to their own option ; at the same time they were all dispensed from the necessity of submitting to the examination of the medical college, which otherwise every physician must undergo previous to his settling in Russia.—To this time, however, there are not so many physicians as are requisite for all the governments ; but their number is increasing every year, and in the mean time the present ones supply circles which are not yet occupied. The defect of surgeons is entirely removed in most of the governments ; the medical colleges have, as far as has been possible, taken care in all places to provide skilful midwives.

In each government there is likewise a college of general provision, which, besides several other duties, is entrusted with the erection and inspection of the hospitals and infirmaries of the town *. These are instituted for a determinate number of patients (about twenty or thirty) and may not admit any more. They are intended for the poor and necessitous, who are cured and attended free of all expence; but whenever there are vacancies, other patients and gentlemen's servants are taken in; these are allowed separate beds, but pay a very moderate sum for their cure. — Besides these infirmaries the college of general provision maintains particular houses for incurable patients who have no support, and receptacles for lunatics. The design of the former is that the unhappy objects, for whom they are destined, may not deprive such of the poor as are afflicted with curable diseases of a place in the hospitals, and yet not themselves be entirely without relief. The college of general provision is bound to provide them lodging, board, nurses, and attendance, that at least they may have some mitigation of their sufferings. In the houses for lunatics poor patients of this description have free admittance: but such as have the means must pay for their maintenance and attendance an adequate sum.

For the erection and regulation of these and other institutions for the relief of suffering humanity, with-

* Ordinance concerning the governments, chap. xxv. sect. 380. 386. 388, 389. 394.

in the province of the college of general provision, each of them receives at its opening, from the imperial coffers, the sum of fifteen thousand rubles, which in most of the governments is considerably augmented by the charitable contributions of the public. The said college was also empowered to establish apothekes, and to employ the profits arising from them to the benefit of the aforementioned institutions; but on condition that they should be supplied gratis with all necessary medicines.

In the capital, in the residence, and in the generality of populous towns, these institutions are now not only upon a much larger scale than the general precept at first promised; but they are multiplied in various ways by the co-operation of the community at large. That we may give at least one example of the greater institutions of this kind we will here insert a brief description of the town-hospital of St. Petersburg*, which was founded in the year 1784. — It is built in one of the skirts of the city by the side of the beautiful and broad Fontanka-canal, and consists of a large, brick, insulated building of handsome but simple architecture. The ground floor is devoted to the æconomical purposes of the institution, and the upper stories are occupied by the patients. The rooms are lofty and spacious; and instead of ventilators, some of the window-shutters are pannelled with wire-work. In winter the

* Georgi, beschreibung von St. Petersburg, chap. i. p. 241.

warmth of the rooms must never be greater than ten to twelve degrees of Reaumur.

This house, the internal arrangement whereof is modelled after the hospital of Vienna in its best properties, receives all necessitous patients, venereal excepted, and attends their cure without fee or reward; handicraftsmen and gentlemen's servants pay four rubles per month. All patients on admission are immediately bathed and have their heads shaven; this done, they receive the hospital clothing and severally a bed, having curtains round, but no tester. The two sexes are kept entirely apart. The number of beds amounts usually to three hundred, but in cases of emergency is increased to four hundred. In the year 1790, six contiguous buildings of timber on brick foundations were erected behind the main edifice, by the college of general provision, and furnished with two hundred and fifty beds. Here the patients in summer enjoy the free air; and, during the interval thus procured, the principal building is thoroughly cleansed, and the atmosphere changed by currents of air. — Besides its projector and chief visitor the counsellor of state von Kelchen, this institution has a staff-surgeon and five other surgeons; it has likewise a naturalist belonging to it appointed for the purpose of trying the effects of electricity on the patients.

This salutary institution, which does as much good as can be expected from it in the present circumstances, has however experienced the fate of
all

all institutions of this nature ; namely, patients are often brought to it so late that they can scarcely be lifted out of the bath and put to bed, which is in a great measure owing to the aversion entertained by the common people to public hospitals. In the four years from 1786 to 1789, it had altogether taken in 9427 patients, and the number is found annually to increase. Of these 7417 were sent out cured, 1773 died, and 237 remained in it at the conclusion of the latter year.

In the mad-house, which with its small end abuts upon the back front of the main structure, is upon the same footing and under the same direction, are forty-four rooms in two ranges, the one for male and the other for female lunatics. A broad passage divides them ; the door of each chamber is fastened with a spring latch, which the keeper can open from without. The raving are not confined with chains but with leather thongs, while the quiet are suffered to walk freely in the passage or in the court. This institution has also in common with the foregoing a garden for recreation. The whole establishment, treatment, method of cure, and diet, are gentle and well-conducted, as plainly appears from their effects. In the three years from 1787 to 1789 altogether were there 229 of these miserable beings, of whom 161 were sent out restored, 11 dismissed into the poor-house as incurable, 47 died, and 10 remained behind.

The city-hospital of St. Petersburg for poor and incurable patients was opened in 1781. The indigence

gence which qualifies for admission to it is distinguished into degrees which form two classes, one whereof comprises the completely impotent, who have a claim to the full benefit of the house; to the second class belong those who are capable of doing some kind of work. These latter are employed in any adequate occupation about the house. According to the establishment the expenditure of the hospital amounts annually to 15,417 rubles. — The city-hospital at Mosco, which was endowed in 1775, admitted at that time a hundred and fifty patients, and is completely on the same footing with that of St. Petersburg. A mad-house is likewise connected with it.

Now, though the description of these institutions would be suitable only to a few towns in the empire, it is nevertheless certain that several on a smaller scale are proportionably upon as good a footing and as well conducted; and that the benefit accruing from Catharine's philanthropic regulations for the preservation of her people, and for the alleviation of poverty and affliction among them, acquires for that great princess one immortal merit more. Where the end is so generous and humane, and where the means are so well selected, the effects must correspond with the design; and who will pretend that both of them are not here in concurrence?

Besides the classes of public hospitals already named, which, by the regulations for constituting the governments, must be in every one of them, there are in many other institutions of a similar nature,

ture, partly endowed by the crown, and partly by rich and humane individuals. Among them the excellent hospital founded at Mosco in the year 1763 by the grand-duke and heir apparent Paul Petrovitch, deserves particular mention, in which, at his expence, fifty persons are always maintained at a time, cured, and attended gratis. The philanthropic Mr. Howard, who visited this hospital himself, says that it would be difficult to find a better situation in the vicinity of the city for this institution, having a large airy spot before it. The building consists of only one story, and stands two or three steps higher than the garden. The rooms are lofty, and each of them has an opening in the roof; the upper part of the window was likewise open, a circumstance, he adds, which he never observed in any other hospital in Russia. All the apartments are cleanly and kept in good order; the beds are of blue linen and sufficiently large, being six feet two inches long and two feet ten inches broad; sufficient space is left between for making them. He tells us that he tasted the bread and the beer, and found them both very good; and adds, on the whole, I must confess that this little hospital would do honour to any country. When I visited it there were in it nineteen men and seven women, besides about an equal number of venereal patients, who were kept in rooms quite separate; the kitchen and offices are commendably apart from the main building*.

* Observations made on his last journey, 4to. 1794. p. 37.
To

To the medical-surgical school in St. Petersburg a small clinical hospital is added, which, besides its peculiar destination, to furnish young surgeons with an opportunity for practical improvement, is also beneficial to upwards of a hundred poor patients annually. — In the same city is likewise a lazaret for venereal patients, founded by the crown in 1783. It has sixty beds, whereof thirty are for men, and the same number for women. Those that are admitted may keep themselves in perfect incognito, but may not leave the hospital before they are completely recovered. — We pass over a multitude of other institutions of a like nature in Mosco and other great towns of the empire, which have principally arisen from the bounty of well-disposed persons in private life. Certain it is that few other countries afford so many and such striking proofs of the liberality and compassion of the public at large in charitable institutions.

In the second class we must place the **MILITARY-HOSPITALS**. They chiefly date their origin from the time of Peter the great, or the creation of the regular army and the fleet.

For the land-forces, besides the two general land-hospitals in St. Petersburg and Mosco, there are fourteen large field-hospitals at Astrakhan, Bogoyavlensk, Kherfon, Kriukof, Riga, Reval, Elizabethgorod, Orenburg, Vyborg, Frederiksham, Kazan, Lubenau, Smolensk, and in Caucasus, without reckoning the several battalion-lazarets, which are every-

everywhere in great numbers. Each division has moreover its own physician, and belonging to the whole army are appointed three general-staff-medici, and above five-and-twenty doctors, as they are called. — All the field-hospitals receive the sums assigned to their support from the war-commisariate.

The general hospital for land troops in St. Petersburg was instituted by Peter the great; it stands in one of the out-quarters on the bank of the Neva, and has now commonly a thousand beds; but in time of war, and when recruits are raising, the number is twice or three times as great. It admits, besides the guards and the artillery, who have their own medical establishments, all the patients of the army. The medical persons belonging to it are a physician, a chief surgeon, an operator, five surgeons, and twenty assistant surgeons, fifty pupils, and an apothecary, to which may be added several assistant-physicians and voluntary surgeons without stipends; which last, by way of recompence, if they are found expert in their examination are immediately appointed surgeons by the medical college. The whole expences, exclusive of the maintenance of the patients and medicines, amount annually to 9620 rubles. — The general hospital in Mosco, on the bank of the Yasua, consists of twenty-three wards, has nearly the same establishment, but the salaries are somewhat smaller.

The eleven sea-hospitals at present subsisting are at St. Petersburg, Cronstadt, Oranienbaum, Riga, Archangel,

Archangel, Kazan, Taganrok, Bogoyavlensk, Kher-
 son, Reval, and Sevastopol. They receive their
 pay from the two admiralties of the Baltic and the
 Euxine. — The hospital for marines in St. Peter-
 burg is on rather a smaller scale than the land hos-
 pital of that place, but is equal to it in its establish-
 ment*. In the war-years 1788 and 1789 it had
 7900 to 8800 patients. The stipends and other
 disbursements, not including the maintenance of
 the patients or medicines, amount yearly to 6870
 rubles. — As the sea-hospital at Cronstadt during
 the last swedish war was obliged to admit annually
 from sixteen thousand eight hundred to twenty-five
 thousand patients, therefore about that time a new
 marine hospital was constituted at Oranienbaum,
 and a part of the imperial palace there was granted
 and fitted up for that purpose †.

A third

* The following are the stated salaries in the two hospitals at
 St. Petersburg.

	Land Hospital.	Sea Hospital.
The doctor receives per annum - - - - -	1000 rubles	800 rubles
Staff-surgeon - - - - -	600 - -	450
Operator - - - - -	320 - -	320
Surgeon - - - - -	200 - -	200
Under-surgeon - - - - -	120 - -	120
Pupil in surgery - - - - -	80 - -	30 to 80
Apothecary - - - - -	180 - -	180
Pupil in Pharmacy - - - - -	80 - -	80

† Having once appealed to the favourable testimony of the
 philanthropic Mr. John Howard, impartiality requires that we
 should

A third class of public medical institutions consists of those which cannot properly be inserted under the

should not attempt to conceal his less flattering judgment or his censure. His account of the land and sea-hospitals on the whole is favourable enough; but in the establishment of the marine hospital at Cronstadt he finds much to blame. And still more severe is his judgment on the field-hospitals in the interior of the empire. It appears, however, after the most careful inquiries of upright and skilful army physicians, that our worthy countryman, being totally unacquainted with the form of government, the manners and the language of the Russian nation, and beguiled by his enthusiastic humanity, was at times prompted to draw hasty conclusions. The harshest censures which Mr. Howard passes on the Russian field-hospitals relate principally to the following particulars; 1. Defect of cleanliness. This indeed is not to be vindicated; yet the ideas of cleanliness in an Englishman and a Russian are so very different; that things which might appear extremely striking to Mr. Howard, with the latter would excite no sensation whatever. Mr. Howard, however, praises the contrary on many occasions. 2. Confined air. To live in rooms close shut up, as Mr. Howard himself remarks, is the custom of the country. Several hospitals are provided with ventilators, but the patients themselves request that no use may be made of them. 3. Bad nourishment. Here we should have regard to custom. When Mr. Howard finds the *quas* sour, and finds fault with it for being so, he shews himself utterly unacquainted with this beverage, as well as with the *sbitin*. The *quas* should be sour; and this wholesome antiscorbutic national drink is only then spoiled or badly prepared when it has no acid. That Mr. Howard should find the nutritious, but coarse and black bread, bad, is very conceivable to an Englishman, who is only accustomed to white bread; but the Russian finds himself very healthy with it, and desires no better. 4. Want of good nursing,

the former heads, and the subsistence whereof is for the most part entirely independent on the foregoing establishments. To these principally belong the houses for lying-in women, foundling hospitals, and those for the small-pox, as likewise the pest houses. A particular account of all these will certainly not be required in a work of this nature; but it would be an unpardonable omission to pass them over in total silence. Some specimens of the most remarkable of each kind will sufficiently answer our purpose, by enabling the reader to form a judgment of them all.

Even should the important question: Whether **FOUNDLING-HOSPITALS** destroy or preserve more human lives? be not at present generally determined, but found extremely problematical from more recent observations and enumerations; yet it seems to be agreed on, that the great institutes of this kind in the two chief cities of the russian empire have doubtless hitherto been highly beneficial to it. The discoveries which gave occasion to the erection of that in Mosco, leave no doubt, that of all the children hitherto brought up in it, not the hundredth

nursing, and particularly of female attendance. The matter of this reproach would certainly not be justifiable, especially if it were true what Mr. Howard affirms of the hospital at Kherlon, that the nurses who wait on the patients are people who have been turned out of the regiments on account of their stupidity and drunkenness.

part

part would have been alive but for that institution ; and that consequently, even in times of the greatest mortality, it preserves to the state a very considerable number of young citizens. But how much more profitable it must be when we consider it on the moral side, and think of the secret crimes that this institute has prevented, which since the foundation of it have been almost entirely unknown. The foundling-hospitals in Russia preserve not merely human beings to the state ; they deliver to it citizens, free, industrious burghers, endowed with useful knowledge and abilities. For these and many other reasons, there can no longer be any question concerning their absolute utility : the only object of inquiry therefore is, whether or not they have produced proportionately as many good effects, as might reasonably be expected from the extraordinary means with which the empress Catharine, and the unexampled co-operation of a large and wealthy public, have supplied them.

In order to put the reader in a condition to answer this question himself, we should be glad, if we had room, to lay before him a full account of this institute, the principal object of it being more the cultivation than the mere preservation of the citizen * ; but at present we must confine ourselves solely to the latter

* That this was really the main design in the foundation of these institutes is manifest from their very denomination. For, in public papers and records, they are never called foundling-hospitals, but always education-houses.

part of this great and comprehensive plan, namely, the preservation of the first physical existence, till the age when education properly begins.

The education-house at Mosco was founded in the year 1763, and stands on the bank of the Moskva, in one of the best quarters of that capital. The many and spacious buildings of which it consists, and the foundation whereof cost nearly as much as the superstructure itself, are, as well in regard to magnitude as to magnificence, unequalled in Europe for a similar destination. The whole forming a perfect quadrangle of five stories, the basement is devoted to the purposes of œconomy, the next three floors are inhabited by the children, and the uppermost contains the wards for the sick. In the middle of this quadrangle stands the magazine. The porter lives in a lodge at the entrance of one of the courts before the said quadrangle, where likewise the baptistery is built, and where the children must be delivered who are brought after the gates are shut, which is always done at nine o'clock in the evening. Over against the porter's-lodge are the lying-in apartments or accoucheur-hospital, very commodiously fitted up. In what is called the corps-de-logis, but which is not yet entirely finished, standing in the forementioned court and connected with the square, is the church, one of the handsomest in Mosco. — Besides the numerous buildings belonging to the education-house within its walls which are about four versts

in compass, it has without the city an excellent farm, on which are kept upwards of eighty cows of the breed of Holland and Kholmogor, the milk of which is entirely used for the first nourishment of the children *.

Of the direction and the officers belonging to this grand institute, we shall mention only those who are entrusted with the care of health. These are: a doctor, three surgeons, an assistant-surgeon, and an apothecary, who all, the doctor excepted, live in or near the house. The physician's duty is to see to every thing in general that relates to health, to prescribe the necessary medicines for the hospital, to instruct the midwives, and to lend his assistance in difficult births. The surgeons must inspect the children who are brought into the education-house, send the healthy to the rooms devoted to the children, and the sick or suspected into the hospital, where they must be alternately present. The midwives, who, previously to their admission are examined by the physician, cannot be absent from the house without leave first obtained from the superintendant, and according to their instruction, have the care of the lying-in women and the new-born children. For the infants, nurses, wet and dry, are provided; and every age of the boys as well as girls has its particular guardians of both sexes.

* Heym's topographical Encyclopædia of the russian empire, art. Moskva, p. 500.

The foundling-hospital receives children at all hours of the day or night, without any question being put to the bringer, except whether the child has been baptized, and whether it has a name. Children may also be carried to the parish priests, or to the monasteries and poor-houses of the city, who immediately send them away to the foundling-hospital, where the deliverer receives two rubles for each child. The carriers of such children are by day and by night under the special protection of the police. At the reception of every child, the day, the time, and the sex are noted in a book, with all that the bringer declares of the circumstances of the child, the clothes and other articles he brings with it, and the birth-marks and tokens observed upon it. Hereupon the baptism ensues, if not already administered; the name is entered in the book, and a little crucifix is hung round its neck with the number under which it is registered. It is now examined by the surgeon, and brought to the childrens' rooms, where it receives new linen and necessary clothes from the magazine; meanwhile the articles of dress brought with it, if they be not too miserable, are deposited in a magazine apart, there to be kept.

The children are either suckled by strong and healthy nurses, each of whom can nourish two babes, or delivered to dry-nurses who bring them up with other food. The physical education alone continues two years, when they come into the great rooms.

rooms. Till the sixth year boys and girls remain together, and during this period are habituated to easy employments. With the seventh begins the moral and civil education; thenceforward the preservation of the physical existence is a subordinate object, and this is therefore the term we prescribed to ourselves for quitting for the present this institution*.

On the manner in which this beneficial plan is executed we will hear at least one witness, by citing the judgment of a sagacious and attentive observer, who, being an Englishman and a traveller, could probably have no interest in dissembling the truth. "The rooms of the foundling hospital," says Mr. Coxe†, "are lofty and large; the dormitories, which are separate from the work-rooms, are very airy, and the beds are not crowded: each foundling, even each infant, has a separate bed; the bedsteads are of iron; the sheets are changed every week, and the linen three times a week. In going over the rooms I was particularly struck with their neatness; even the nurseries were uncommonly clean, and without any unwholesome smells. No cradles are allowed, and rocking is particularly forbidden. The infants are not

* General plan of the foundling-house at Mosco, in the *Neuveranderten Rusland*, vol. ii. 40—47.

† Travels through Poland, Russia, Sweden, and Denmark, vol. ii, p. 63. 8vo. edit.

“ swaddled according to the custom of the country,
“ but loosely dressed.—I could be no judge merely
“ in visiting the hospital, whether the children were
“ well instructed and the regulations well observed:
“ but I was perfectly convinced from their beha-
“ viour, that they were in general happy and con-
“ tented, and could perceive from their looks that
“ they were remarkably healthy. This latter cir-
“ cumstance must be owing to the uncommon care
“ which is paid to cleanliness, both in their persons
“ and rooms.

“ In another visit which I paid to this hospital,
“ I saw the foundlings at dinner: the girls and
“ boys dine separately. The dining-rooms, which
“ are upon the ground-floor, are large and vaul-
“ ted, and distinct from their work-rooms. The
“ first class sit at table; the rest stand: the little
“ children are attended by servants; but those of
“ the first and second class alternately wait on each
“ other. The dinner consisted of beef and mutton
“ boiled in broth, with rice; I tasted both, and
“ they were remarkably good: the bread was very
“ sweet, and was baked in the house, chiefly by the
“ foundlings. Each foundling has a napkin, pew-
“ ter-plate, a knife, fork, and spoon: the napkin
“ and table-cloth are clean three times in the week.
“ They rise at six, dine at eleven, and sup at six.
“ The little children have bread at seven and at four.
“ When they are not employed in their necessary
“ occupations the utmost freedom is allowed, and
“ they are encouraged to be as much in the air as
“ possible.

“ possible. The whole was a lovely sight ; and the
“ countenances of the children expressed the utmost
“ content and happiness.”

The confessedly sound principles on which the system of physical education is built ; the great means of relief which this establishment has at its disposal ; the good management of it hitherto by distinguished patriots ; the care, attendance, and cleanliness, which, from the testimony of all impartial observers, prevail there ; — all these circumstances conspire in enabling us to conclude with the highest degree of probability, that this beneficial institution does not fall short of its primary and proximate aim ; but certain data on this subject have not as yet come to the knowledge of the public. It would be of great service to the world, and at the same time redound to the honour of this institution, if necessary statements were given of the numbers received every year, and the other concerns of the house. — All that we know at present of it is, that, in the twenty years since its opening to the end of the year 1786, including those born in the house, it had admitted 37,607 children, of whom 1020 were sent out, and at the end of the last mentioned year only 6080 were remaining. If this statement, in which we follow a very authentic writer *, be strictly accurate, the loss which this institution has sustained must surely be very consider-

* Georgi, beschreib. von St. Petersburg. vol. i. p. 255.

able ;

able ; but probably only a small part of it would fall upon the foundling-hospital, if we knew precisely the number of those who died immediately after their reception, or brought in with them the germ of dissolution. We shall not be in a condition to ascertain the real mortality of the house, till we are informed by just estimates how many of the children brought were declared after examination to be perfectly sound ; the remainder which must be delivered into the hospital immediately after baptism, consists of certain victims to death ; and none would be so unreasonable as to lay their loss to the account of a philanthropical institution, which enriches the country from year to year with an ever-increasing number of healthy, active, and industrious burghers.

The foundling-hospital at St. Petersburg, which is, properly speaking, only a division of that at Mosco, was founded in the year 1770, and in 1784 was endowed by imperial munificence with a sumptuous edifice. The establishment is exactly like that of Mosco ; the number of foundlings there at the end of the year 1788 amounted to 300. Here also the same unfortunate circumstance happens, that a great proportion of the children are brought thither sick, and many even without a spark of life remaining. — Besides these two great institutions, others are erected on the model of them in several towns of the empire, as at Tula, Kaluga, Yaroslaf, Kazan, &c.

In

In order to render the foundling-hospitals of still greater benefit, LYING-IN HOUSES are annexed to them, in which all pregnant women without distinction, on merely announcing themselves, are immediately admitted by the porter; and, without putting to them a question of any kind, are instantly, whether it be day or night, conducted to the midwifery rooms. To spare those who enter the confusion they would feel at being known, it is not only strictly forbidden to discover any curiosity about them, but it is at their option to keep their face covered during the whole time of their stay. The lying-in house is provided with all the requisite persons and instruments; on urgent occasions the midwives are assisted by the physician, who in cases of necessity must perform the operation himself. As the hour of delivery can scarcely be accurately ascertained, women are permitted to be in the hospital a week before and two weeks after lying-in, to which regulation, however, in extraordinary cases, exceptions are made. During this time the patients enjoy all the needful attendance and nursing. — At the foundling-hospital of St. Petersburg a proper person is appointed as teacher of the art of midwifery, for forming expert practitioners as well for the house as for the public in general.

The school of medicine and surgery at St. Petersburg has also a small lying-in house, capable of admitting

mitting eight or ten females at once, in the peculiar design of affording practical information to the pupils of this institution as for the sake of forming skilful accoucheurs. Here, likewise, the greatest secrecy is observed; when recovered the patients are discharged without fee or reward, and they are at liberty either to take their children with them or to leave them for the foundling-hospital.

Next to these institutions none deserve our attention more than the SMALL-POX HOSPITALS, erected in the view of extending the practice of inoculation. Russia, in the eighteenth century, appears to have the advantage over most other countries in Europe, that establishments of general utility meet here proportionately with fewer difficulties, are encouraged with far greater munificence from the throne, and more quickly attain to a generally diffused operation. A remarkable instance of this is seen in the history of inoculation; a benefit which Russia owes to the enlightened administration, and to the personal example of Catharine II. and her imperial son.

Long ere lady Mary Wortley Montague in 1721 brought the art of inoculation from Constantinople to England, this mode of preservation was known to the oriental nations. From England the practice was spread into the other countries of Europe, but with very tardy progress; as in most of these countries not only the clergy but even physicians stood up in opposition to it, and acted on the prejudices of the people, always of themselves disposed to

to resist any innovation. Four-and thirty years after the introduction of this happy discovery only two hundred thousand were reckoned to have been inoculated ; and, during that space, the public confidence in it had so much abated, that for fifteen years it was almost entirely neglected. — Of all the provinces of the russian empire Livonia was the first that employed this preservative. A physician in the circle of Dorpat * made it here first known in the year 1756, and practised it with so much success in the country round him, that within eight years he had inoculated 1023 children, of whom only one died. In St. Petersburg the first public experiment was made in September 1768 on ten children, though since 1758 several trials had been hazarded by some physicians of the place, but without attracting observation. In the same year Catharine II. set a glorious and affecting example to her people, by submitting herself, together with her only son Paul Petrovitch, then fourteen years old, to inoculation. The operation was performed by our countryman Dr. Dimisdale †, then already famous by his successful practice of the art, who, in conse-

* The name of this person, who rendered such service to his country, ought not to be passed over in silence ; it was Schulinus, who had already gained great reputation in those parts by his successful treatment of the natural small-pox. See concerning him, Gadebusch Livonian Bibliotheca, *art.* Schulinus, vol. i. p. 120.

† See Life of Catharine II. vol. i. p. 469.

quence of the prosperous termination of it, was rewarded in a truly imperial manner with riches and honours. In order to perpetuate the memorial of this event, so important to the whole nation, an anniversary thanksgiving was appointed to be kept. The great nobles of the empire, the inhabitants of the residence, all ranks and classes of people, seemed to vie with each other in following so illustrious an example. Not a single physician, not one ecclesiastic made any public opposition to inoculation; almost all of the former adopted it in their practice, and several among the latter recommended it even from the pulpit, to which the church service of the anniversary presented a fair opportunity. To this is even owing the valuable series of discourses which we have before made use of, and from which the present accounts are principally extracted*.

For the more active and rapid promotion of the practice among the poorer classes of people, a public institution for inoculating was erected in the year 1768 at the imperial expence in one of the out-parts of the residence, now known by the name of the Small-pox hospital, and where every month a certain number of children are inoculated and nursed for two weeks till their complete recovery. At

* Sermons by J. C. Grot, on inoculation of the small-pox, with particulars relating to the history of it in Russia, and an appendix on the mortality of the small-pox in Petersburg, as a help to the examination of the question concerning their harmlessness in Russia.

first money was given to parents who brought their children hither ; but the numerous instances of the success of the artificial infection soon rendered this encouragement unnecessary. — Since the year 1783, the small-pox hospital has been under the inspection of the college of general provision. It at present admits twice a year, in spring and autumn, free of all expence, all children that are brought, and has a physician and a surgeon to attend them. The expences of this institution amount annually to six thousand rubles.

Shortly after the erection of this hospital, inoculation was also introduced into all the great imperial seminaries of education. From St. Petersburg it gradually spread into the interior of the empire. So early as the year 1768, baron von Asch introduced it into Kief. In the year 1772 the practice of inoculation entered Siberia ; the empress even constituted in Irkutsk a public institution for that purpose. In this, within the first three years, not only of the Russians, but likewise of the nomadic tribes of those parts, 6768 persons of both sexes were inoculated. In a period of five years the number of them amounted to 15,580. In Kazan, likewise, a public inoculation hospital was founded by the governor of the place.

These institutions have since so greatly increased that we are not in a capacity to give a complete list of them. Not only most of the great towns, but
even

even many villages and noblemen's estates are at present provided with these hospitals. Add to this, that the prejudices against inoculation are so totally vanished, and the conviction of its utility become so general, that there are but few parents, at least in the upper ranks, who omit to endeavour at ensuring their children in their earliest infancy, by this easy operation, from the danger attending the natural infection. In several districts the country people, who can seldom rely on having the aid of a physician, have been taught to inoculate themselves, and they practice this method with the happiest effects. In Livonia, ever since 1769, pastor Eifen has acquired great merit by not only inoculating, but by inducing the boors, and especially the mothers, to employ that method under his direction. In the government of Irkutsk, M. Schilling, the staff-surgeon of the place, still employs himself in teaching the nomadic people, at their own request, the art of inoculation. From May to August 1791, he inoculated there in the circle of Barguzinsk five hundred and sixty-five Buræts, thirty-five Tunguses of the steppes, and twenty reindeer-Tunguses, altogether, therefore, six hundred and twenty persons of both sexes, of whom only six died*.

* According to a Report made to the medical college, October 1791.

In order to enable us to judge of the effects that have arisen from these small-pox institutions since their introduction into the russian empire, it will not be uninteresting to read the following result of the petersburg small-pox hospital, drawn up by the academician Kraft, and incorporated in his third memoir on the lists of births and deaths published at St. Petersburg *.

In the eleven years from 1780 to 1790 there were inoculated in this institution 1570 children, 860 males, and 710 females, of whom four died. This proportion is as twenty-five to ten thousand; or, of a thousand inoculated children, there die not quite three. On an average it may be admitted that in Petersburg of ten thousand children attacked by the natural small-pox 1428 die; consequently, the proportion of the mortality of the natural small-pox to the mortality of the inoculated is as one thousand four hundred and twenty-eight to twenty-five, or as fifty-seven to one.

The number of children inoculated in this institution, on an average of eleven years, amounts annually to one hundred and forty-three. Now Petersburg in the same period has yearly 6049 births, and consequently only the forty-second child of all the births has enjoyed the benefit of this institution. — It is here to be remarked, that parents in easy circumstances have their children inoculated at home,

* Nova acta acad. scient. Petropol. tom. viii. p. 253.

and therefore the universality of this practice cannot be judged of by the above proportion. — The age of the inoculated children was never under three and a half, and usually from three to ten years. Nine persons, however, were inoculated at the age of sixteen, two of twenty-five, and one of forty-six.

It would be found very instructive if we were enabled to compare these statements with those of the small-pox hospitals in other towns of Russia. In that of Irkutsk, for example, in five years, from 1773 to 1776 and in the year 1779, in all 6009 persons were inoculated, of whom forty-three died. Of ten thousand inoculated here then seventy one were lost, or out of a thousand seven, as the mortality of the petersburg small-pox hospital amounts only to three out of a thousand. The mortality of the natural small-pox is known to be greater among the nomadic nations; and, besides, those inoculated at Irkutsk were probably for the most part grown persons.

We cannot close this head without mentioning the institutions against the most dreadful and destructive of all diseases; against a disease which though it appear but seldom in the civilized countries of our quarter of the world, yet by the devastation it makes, where it has once struck its root, whole generations are slain, and whole regions laid waste. Russia too has experienced this great public calamity, and has learnt to know the effects of the

PLAGUE

PLAGUE from the desolation it has occasioned: from her situation, her commerce, her borderers, and her wars, she is more exposed to this horrible contagion than other countries: it becomes naturally, therefore, one of the most important concerns of government to obstruct the communication of the infection by preventive institutions, and to collect practical rules which, in the lamentable case of its raging, may mitigate the general distress. The point of time since which this matter has become an important object of state policy is too near the present to allow us to forget it; and thanks to the regulations of Catharine II. and to the enlightened age in which we live, that this dreadful catastrophe at least did not pass by without benefit for futurity!

From more antient accounts we learn that Mosco had the misfortune in the 17th century to be ravaged by the plague: in the year 1654 it raged for three months, (July till September,) and did not entirely cease till between the 12th and 25th of December. In the two succeeding years it broke out in some of the southern districts, but never came to Novgorod. It therefore at that time took nearly the same route as it was found to do in the eighteenth century: but as nobody then thought of minuting down the circumstances of that unhappy event, and the means of prevention that were then had recourse to, the benefits that might have accrued from that lamentable visitation were lost to posterity; and when

Russia a hundred and sixteen years afterwards was afflicted with the same scourge, it was found necessary at once to make the people sensible of the baneful nature of the disease, and to find out new measures to be adopted against it. In order to give permanency to the usefulness of these institutions, the commissioners, consisting of the officers of state and physicians appointed to check and to heal the ravages of the plague, resolved to commit to the press all the regulations and writings that came out either during the distemper or after it had ceased, and to publish them together for the information of future times; and it is from this instructive collection that we shall here lay down some of the most prominent data as outlines of the history of that deplorable event *.

The

* To this end the commissioners requested permission of the directing senate, and entrusted the publication to one of their members, the college-counsellor Athanasius Schafonsky, superior physician of the army-hospital. The work bears this title: *Opissanie moravoi yaslvi*, &c. that is, Account of the plague which raged at Mosco from the year 1770 to 1772, with a supplement of all the regulations that were ordered to be observed for the extermination of it. Printed by sovereign command, in the year 1775, in Mosco, at the imperial university; 4to. pp. 652. without dedication, preface, or contents; with two copper plates. It contains, besides a two-fold description of the plague composed by the editor himself, 121 additional papers, as, the writings of the commissioners, the rest of their adopted regulations, the manifestoes, ukases, opinions of several physicians, and many other pieces relating to this calamitous event. — On

account

The plague made its first appearance during the former of the two turkish wars in Valakhia, and spread itself thence, through Moldavia, through Poland, and through Little Russia, to Siyefsk and Bryansk, two towns not far from the borders of the Ukraine. In Kief it lasted from August 1770 to the February following; it appeared, indeed, afresh in the ensuing summer, but was presently checked. The institutions were in general so efficacious in these parts, that only in Neshin a second rather severe attack of the plague was felt from July till November 1771.

The case, however, was far otherwise at Mosco. In defiance of all precautions the plague reached the capital, where it was first observed, though but little, in November 1770, to be in some houses. But, on its breaking out on the 17th of December in the general army-hospital, and the head physician of it, M. Schafonsky, had informed the medical college of it on the 22d of December, after a consultation of eight doctors had made a declaration that this sickness was really the plague, that hospital was shut up, in which, of twenty-seven patients, only five recovered. Not till after a quarantine of six weeks was the hospital opened again,

account of the great extensiveness of the original, I have adhered solely to the accurate abstract, made with the most scrupulous attention and great sagacity by Mr. Bachmeister, which is to be seen in the fifth volume of his Russian bibliotheca, p. 287.

— 318.

and the building in which the plague had been was burnt. — The infection, according to evident traces, had been brought by people coming from parts that were the theatre of war.

In March 1771 it was first known, that ever since the beginning of the year an unusually great mortality had prevailed among the work-people of the great linen-manufactory. By insensible degrees this uncommon mortality was discovered in other quarters of the town. Now, in consequence of an examination made by physicians on the 11th of March, all the people were sent away from the manufactory as soon as possible, and the sound as well as the sick all kept under close inspection; but several had previously made their escape, and even people of the town had visited the manufactory to and fro. Thus, it is natural to suppose, that the infection was constantly spreading farther. — The magistracy now interposed; the police required an account of every distempered and dying person; and the senate convened a medical council of eleven physicians, who continued sitting till the appointment of the above-mentioned commission. This council, at its second meeting on the 23d of March, required that all workmen belonging to the linen manufactory should be removed from the city; an order which could not be strictly executed, as several of them were absolutely not to be found. On the 26th of March nine members of the medical council, to the interrogation of the governor of the city,
feldt-

feldt-marshal count Soltikof, sent a written answer that this malady was really the plague; the other two members were of a different opinion, to the great prejudice of the public, who agreed with them, and therefore neglected the necessary precautions. On the 31st of March, however, all the eleven members subscribed the proposed preservatives, which they had unanimously consulted upon, from this dreadful distemper*.

The empress, in the mean time, seemed to surmise that all the applications hitherto employed would prove insufficient; accordingly on the 25th of March she issued an order to pursue much severer measures, and gave the execution of them to lieutenant-general Yerapkin, who undertook this important commission the 31st of March. The first thing he did was to place a state-officer in every quarter of the town as inspector of the malady, and all the physicians there were enjoined to pay obedience to his commands. From the daily lists of the† deaths
was

* These proposals relate mostly to cleanliness of the houses, streets, air, &c. The filling up the graves in which the dead bodies were deposited with lime was thought not advisable. The public places had been long before fumigated, but commonly with dung and other impure substances. Also an order came out in March to seal up all the public baths.

† These lists deserve, at least according to the months, to be inserted here, as they plainly shew the violence and vicissitudes of this horrid disease. It is only to be observed, that they are not entirely complete, as the circumstances shew, and as Schafonsky
himself

was seen indeed the progress of the pestilence; but as till then no bills of mortality had ever been framed in Mosco, there were no means of comparing the number of deaths with that of ordinary years.

In regard to the extent and population of the city, the number of the deaths in April 1771 was reckoned moderate; and it appears that the existence of the plague was at that time more doubted of than ever it had been before. In the mean time an order signed by the empress's own hand came out to carry all bodies out of town for burial; also some of the entrances to the city were fastened up.

During the months of April and May the plague had almost entirely ceased among the above-mentioned people of the linen-manufactory in the monasteries which served them for hospitals; and in the city it was mistaken, as the inhabitants were inexhaustible in inventions to give it another appearance.

— In

himself remarks. Many corpses were concealed and secretly interred; numbers of people had already left the city so early as July, and according to Schafonsky's own declaration, but few inhabitants were in September left in the city. Now, seeing, as Mr. Bachmeister observes, that in September above twenty-one thousand persons died, and the usual population amounting to upwards of four hundred thousand, then in that one month, not the twentieth, but perhaps the sixth, perhaps the fifth, or even a far greater part of the then present inhabitants, must have died. — The state of the population after the plague may be seen from the summary statement of the following years. During the latter

—In June it was ordered to search for the scattered clothes and other matters belonging to the linen-manu-

latter (1775) the court was at Mosco, and consequently the number of inhabitants greater than ordinary.

In the Year 1771.	DEATHS		Together.	BIRTHS.
	In the city.	In hospitals and quarantines.		
April - - - -	665	79	744	—
May - - - -	795	56	851	—
June - - - -	994	105	1099	—
July - - - -	1410	298	1708	—
August - - - -	6423	845	7268	—
September - - -	19761	1640	21401	—
October - - - -	14935	2626	17561	—
November - - -	3466	1769	5235	—
December - - -	319	486	805	—
Totals	48768	7904	56672	
1772.				
January - - - -	209	121	330	—
February - - - -	274	78	352	—
March - - - -	304	30	334	—
April - - - -	374	—	374	—
May - - - -	285	—	285	—
June - - - -	247	—	247	—
July - - - -	276	—	276	85
August - - - -	354	—	354	249
September - - -	238	—	238	231
October - - - -	268	—	268	363
November - - -	284	—	284	342
December - - -	350	—	350	240
Totals	3363	229	3592	1510
1773	—	—	7195	3989
1774	—	—	7527	3395
1775	—	—	6559	2108
to the end of August				

In

manufacturers and to burn them : but this, like many other salutary ordinances, had a directly contrary effect ; for now these things were secretly conveyed into other houses, and thus spread the infection the more. As the flight of the rich and noble, which had continued some months, must have carried the sickness into the country, a command was issued in August to visit their servants and to detain the suspected ; the rest had liberty to go away. Now likewise the common tippling-houses were shut up, and the order for sealing up the baths was repeated. — In this month the ravages made by the plague were manifested in a very dreadful manner ; many of the inhabitants therefore endeavoured to provide for their safety, by locking up their houses and court-yards. The common people regarded all the applications recommended by the magistracy only with great dislike. They were principally set against the sick-houses and quarantines, which they considered as unnecessary inventions of the physicians ; they resisted the visiting of the sick, and would have murdered the college-counsellor Schafonsky, if an inspector of the quarter had not come to his rescue. On the other hand, the sectarists known by the name of raskolniks, distinguished themselves from the great

In the four years from 1783 to 1786, the number of births amounted to 27,240, and the deaths were 19,922 ; consequently, on an average, the annual number of births 6810 ; of deaths 4980.

multitude by their docility and obedience. All of that sect who dwelt in Mosco, and many of them in its vicinity, maintained an infirmary and a quarantine-house for themselves, and at their own expence without the city.

The month of September was the most terrible of all. To the devastations of the plague, which had now risen to their height, was added the well-known insurrection of the populace, in which the archbishop of Mosco lost his life on the 16th of September, and which probably could not have been so easily quelled by such a handful of troops if by the flights and deaths the number of the people had not been much diminished. — The empress, greatly afflicted at this lamentable state of things, resolved to set out for Mosco herself; but this journey meeting with insurmountable difficulties she dispatched count (afterwards prince) Orlof thither, with full powers to put in execution every thing he should think necessary to the extirpation of this dreadful calamity. His presence, and the regulations adopted by him, were soon attended with beneficial effects. Several of those who had quitted the city now returned, and even the behaviour of the common people took a different turn.

Two boards of commissioners were now constituted, who entered on their employment the 12th of October, the one for preventing the contagion, and the other for counteracting its effects. They were to make all the regulations they could devise for

for these purposes ; and all physicians, apothecaries, hospitals, &c. were made dependent on them. The executive commission, beside all other affairs of police, were to see to the due performance of all that the other two commissions required. The former immediately published a printed paper of directions what means to use as preservatives from the plague, and pointing out to such as were already attacked by it, how they themselves could most contribute to their recovery. As the continued abhorrence of the inhabitants against the public hospitals occasioned perpetual concealments, it was thought expedient to give to every person, on his discharge, in consequence of a cure, besides the ordinary allowance of provision and new clothing, a gratuity of five, or if he were married, ten rubles. On this, there were doubtless a great number of sick ; but many healthy persons came likewise, feigning themselves to be sick from motives of covetousness. For the children of parents who had died of the plague, prince Orlof caused the erection of a peculiar orphan-house. After having acquitted himself of these and many other perilous attempts, he returned to St. Petersburg on the 21st of November.

By this time the unfortunate inhabitants of Mosco were at length convinced of their miserable error concerning the nature of this distemper. Their manfuetude and readiness to concur in all the measures adopted by government, produced a visible
diminution

diminution in the number of deaths from day to day, till at length in January 1772, not a trace of the pestilence remained.

That I may give my readers some idea of the condition of this great and populous city during the prevalence of this tremendous scourge, and for some time after, I shall present only some striking features from the picture of their distress, which probably no one will read without horror. — A total stop was put to innumerable branches of business and the several occupations of social life, and new ones rose up in their stead. Many houses were shut up, in the streets were seen but few passengers, and every day was prolific in new scenes of desolation and affright. — To prevent a scarcity of provisions the government erected large houses, in which the necessary articles of consumption were deposited. The loss of employment had occasioned great distress to numbers of people; they were set to work in heightening the wall and deepening the ditch round what is called the chamber-college. In spite of all these methods and many others, it was found necessary to denounce the penalty of death against such as should convey away goods and property belonging to infected persons from the houses that were standing empty, or open graves for despoiling the bodies of such as had died of the plague. — Dwelling-houses or courts, in which only some of their inhabitants had died of the distemper, were computed at upwards of six thousand, and in which

which they all died, at more than three thousand. Now, as Mosco before the eruption of the plague contained 12,538 dwelling-houses, it follows, that not the fourth part of them remained free from that visitation. — From April 1771 to the end of February 1772, in the sick-houses and quarantines 12,565 persons were maintained at the expence of the crown.

Such was the state of the city during that doleful period, and how many new regulations and troubles did it not cost to restore the former establishments; to reduce all businesses and employments to the channel which they had left; to revive trade and commerce; and to do all this with safety and without danger of a second desolation! The most urgent and indispensable measures to be taken were those relating to the purification of infected houses*, which they began to do on the 12th of December 1771, and continued till the following spring.

* Among the buildings which actually underwent purification were a hundred and seventeen churches which had lost their priests or church-officers by the plague, and on that account had been sealed up; forty-five courts of judicature, magistracy-houses and forty-six other public-offices, comprehending those buildings which had been devoted to public uses only on account of the distemper; as for example several monasteries and the house of prince Orlof, which he had given up to be a sick-house for the noblesse; seven thousand dwelling-houses or courts, which were thought worth purifying, and above two thousand bad or ruinous habitations, which were totally demolished; a hundred and thirteen manufactories, whereof sixty-eight were for the weaving of linen, woollen, and silk, altogether having 2716 looms.

This

This was conducted by clearing them of all infected articles ; by letting in the fresh air on all sides, by exposing them to the severities of the frost, by fumigations *, and other methods. — The thirteen burial-places assigned for those who died of the plague were raised more than an arshine in height by fresh earth, which labour alone cost thirty-five thousand rubles. — On the total extinction of all remains of the pestilential poison, regard was particularly had to the corpses, which, to save themselves from the quarantaines, the inhabitants had either buried in their houses or thrown into concealed places, and consequently on the return of spring might be the occasion of mortal exhalations.

• The commission for quelling the contagion caused three receipts for making the fumigatory powders to be published, and the powders themselves to be sold at a low price in all the apothekes, and to be distributed gratis to the poor. The commission, of whose invention they were, resolved first to be fully convinced of the beneficial effects of them by experience. They therefore took some clothes of persons who had died of the plague, that were impregnated with the perspired-vapour, and on which were apparent marks of the matter that had issued from buboes and carbuncles ; hung them up in a house in which all the inhabitants had died of the plague ; fumigated them for four days, twice each day thoroughly with these powders ; caused them afterwards to be aired for six days, and gave them to seven people to put on, who had forfeited their lives, and were obliged to wear them sixteen days successively in the same house, nevertheless they all remained free from any infection, and after performing a quarantine of a fortnight, they were allowed to mix with other healthy people.

By

By the vigorous measures that were taken to the discovery of them, near a thousand corpses made their appearance, with which, as they were mostly found without coffins, various proceedings were adopted. Those which had lain within the dwellings, were ordered to be taken, by the katershniks (a species of galley-slaves) appointed for that purpose, with a part of the surrounding earth, in separate boxes or shells, to the usual burial-places, and there to burn the carts on which they were brought. The pits out of which such bodies had been drawn were carefully filled up with earth. While thus employed, the katershniks were made to wear waxed clothes and gloves, to keep ginger and other spices in their mouths, and to stop their ears and nostrils with cotton steeped in vinegar. Lastly they were obliged to wash themselves with vinegar, and to remain for at least eight days in a place apart from the town. On the other hand, those bodies which lay without the buildings, were suffered to remain unmoved, and were only covered to the height of an arshine with chalk and rubbish. Though this interment lasted till the ensuing spring, yet, from the great precautions that were taken, not one of the many labourers, who could not avoid the contact with the dead bodies, caught any infection. — Notwithstanding the good reasons for supposing every spark of the contagion to be utterly extinct, yet the regulations were kept in force till the summer of 1772.

From

From the first of December of that year the city of Mosco was declared to be free from the plague, and a sound place, and the greater part of the regulations that had been adopted against it were gradually diminished; yet the commission for stopping the plague continued till the 6th of September 1775, at which period it, together with all the quarantaines and post-stations established within the empire on account of the plague, were abolished by an ukase from the senate. — The expences occasioned by this public calamity to the state were very heavy; that for the preservation of Mosco alone cost the crown four hundred thousand rubles.

After perusing this brief account, nobody will be surprised that it was found impossible to stifle the pestilence in its birth. Besides the causes which appear from the foregoing narrative, one of the greatest obstacles was in the local position of Mosco, which is thirty-six versts in circumference, and cannot with so much propriety be called a city as the first province of the empire. The majority of the inhabitants are not under the jurisdiction of the corporation, and the magistrates have no power over their entering or quitting the city. It was these people who, in the sequel, when they perceived the danger and would not conform to the ordinances that were issued, hastened in crowds to their homes, and thereby propagated the contagion in the governments of Mosco, Smolensk, Nishney-Novgorod,

Kazan, and Voronetch. To prevent these disorders would have required half an army; whereas at that time, on account of the war, there was but one regiment of infantry, and a few small companies of soldiers in Mosco. It was even found necessary, as many of these died on the road, to raise a police-battalion in the capital, for guarding the posts, and as much as possible to preserve tranquillity and order.

Admirable and humane as the regulations and sacrifices made on the part of government on this occasion were, not less so were the pains that were taken by the commissioners for rendering this dreadful experience beneficial to posterity. The collection of memorials which they published on this unhappy event contains, besides the prescriptions peculiar to the circumstances as they arose, in a copious narrative of practical observations and consequences, a multitude also of excellent rules which may serve as a pattern and foundation for the methods to be pursued in similar cases. Among them are, a comprehensive medical description of the plague, its nature, causes, characteristics, contingencies, and operations; the means of preservation, &c. — Directions drawn up by twenty-three physicians and surgeons for the conduct of common people infected by the disease, and what remedies they ought to use. — A pastoral letter from the archbishops to the priests, directing them how to preserve themselves from infection in the discharge of their functions. —

A complete description of the method of proceeding observed in the pest-houses. — An instruction shewing how the relics of infectious matter may be expelled from houses and goods. — Descriptions and plans of quarantaines and houses for the sick, with several other particulars. — The patriotic personages, who brought this useful undertaking to effect, have the greater claim on the gratitude of their country, as it has frequently since been enabled to perceive the good effects of their advice *.

In order, however, to guard as much as possible against similar events, and even to prevent the communication of the plague, since the acquisition of the Otchakof-steppe, and the provinces from Poland, three permanent quarantaines have been erected along the frontiers of Russia and Turkey; namely, in the harbour of Odeffa (formerly Hadshi-bey) on the Euxine, in the city of Yampol in the government of Brazlau, and in the village of Shvavnetz in the government of Podolia. Each of these quarantaines has a president, an inspector, a staff-surgeon with an assistant, a translator, &c. and a company of two hundred soldiers, with their proper officers. The expences of the establishment of each of these quarantaines amount to 3475 rubles, in which, however, the garniture, provisions, and

* In the autumn of 1772, and in December 1773, the plague made its appearance in some of the southern districts of the empire, particularly at Kitzliar and Mosdok; but by the prescriptions of these commissioners it was soon extirpated and prevented entirely from spreading farther.

ammunition of the company are not comprised. Besides the sum allotted for medicaments, the governor of every government, that is furnished with a quarantaine, is obliged, in case of emergency, immediately to procure all proper requisites, and to demand medicines from the medical people in office *.

All the establishments which we have hitherto been describing for preserving the population have properly no other aim than to the health of the inhabitants; but, besides sickness and death, there are numberless other evils, physical and moral, which prevent the increase of population. A circumstantial detail of all the subjects that lie within the province of the medical-police, is beyond the stated limits of our plan, which comprehends too many articles to allow of their being all complete. We shall, therefore, confine ourselves to a short and abrupt specification of the most material of these impediments, so far as they concern the population of the empire in general.

Scarcity, bad quality, and dearness of provisions, fall immediately under this rubric. — In a country of such vast extent as the russian empire, the diversity of climate and soil must naturally occasion a very striking inequality in regard to the quantity, the goodness, and the price of the various articles of food; but this very inequality facilitates

* Ukase of the 18th of August 1795. Journal von Russland, tom. v. p. 178—184.

to a wise administration the means of preventing a general scarcity, as the superfluity of one region is made to balance the deficiencies of another. The greater part of the russian empire is so abundant in such products as are of general and indispensable consumption, as to have sufficient for bartering against such as may be wanting, and also for supplying the poorer provinces*. Only the regions that lie most to the north and to the east are so sparingly provided by nature, that the subsistence of their inhabitants depends on the importation from other governments; but this unavoidable disadvantage is greatly alleviated by navigable rivers and canals, by good roads, by the ever-increasing commerce of the country, and by the free communication encouraged by the government between the

* Concerning the extreme cheapness of the necessaries of life in the interior provinces, many examples may be seen in the Journals of the academical travellers. At Krasnoyarsk, for instance, about the year 1772 a pood of rye-flour cost from two to three kopecks, of wheat-flour about five kopecks, of butchers-meat from fifteen to twenty-five kopecks; a cow was to be bought for a ruble, a kid for fourteen kopecks at the utmost, &c. Pallas, travels, vol. iii. p. 5—12. — Since that time the prices have risen somewhat, but not considerably. — Fish in many parts are scarcely of any value at all. In several provinces, where the corn cannot be disposed of in the vicinity, the price is incredibly low. In others all sorts of game are in such astonishing plenty that there are no purchasers for it. — In general all the necessaries of life in the interior of Russia (some great towns excepted) are cheaper than in any other country in Europe.

several provinces of the empire. Instead of the numerous intermediate tolls, which in many other countries encumber the distribution of the articles for home consumption, in Russia no pains are spared to facilitate and to secure by laws the beneficial conjunction of all the parts of this prodigious empire. From the coasts of the Baltic to the shores of the eastern ocean the merchant can here transport his commodities without once being obliged to submit them to visitation.

In order, however, not to render the support of the inhabitant entirely dependent on the capricious course and the fluctuating relations of commerce, the administration has adopted the prudent measure of establishing in every government a principal and several smaller granaries; and in the larger towns are public magazines, from which the poorer classes of people may be supplied with the two most indispensable necessities, meal and fire-wood, in moderate quantities, and at a reasonable price; the crown merely repaying itself the capital advanced, without requiring any compensation for the expence of carriage, storing up, and preserving, or the customary duties. By these and several other regulations, which mostly owe their existence to the late empress, it is so managed, that a total and absolute dearth of bread is but rarely felt in particular circles of the poorer governments, whereas formerly it was not unusual in the northernmost provinces, to make up for the failure of flour by pounded tree-bark and
other

other unnatural kinds of aliment *. By the extensive practice of cultivating potatoes, a new resource is afforded to the people of these countries for insuring their support ; and also the gradual transition of the nations of the steppes from the nomadic way of life to the practice of agriculture is continually opening a more comfortable prospect for the future.

A second very material impediment to population is the national propensity to inflammatory liquors,

* It is, however, still a question, whether this *unusual* food be also really *unnatural*, that is, whether it be prejudicial to health and detrimental to population. — That a whole people in the *constant* use of such diet could lose nothing of its physical strength and vigour, we have remarkable instances in several of the northern nations, and particularly the Dalecarlians in Sweden. “ The Dalecarlians,” says a very accurate observer, who spent a long time in that country, “ inhabit the most unfruitful and mountainous part of the kingdom. The summits of their mountains are covered with eternal snow ; a long and hard winter clothes even their vallies in the same dismal garb. Far from affording them any of the accommodations of life, their inhospitable clime scarcely yields them those humble supplies, which by the more southern nations of Europe are commonly called its first indispensable necessities. For want of corn they are forced to mix their bread with the bark of certain trees ; and even this wretched diet constitutes their sole nourishment. Unacquainted with the arts of the second order which provide for the conveniences of life, and from the nature of their soil excluded from agriculture, they devote themselves almost entirely to the labours of the mines, From their infancy inured to every kind of hardship, they compose, however, of all the inhabitants of Sweden, the stoutest and the boldest race of men,” &c. *Histoire de la dernière revolution de Suede, en 1772, p. 157.*

This propensity, which seems peculiar to the northern nations, and in the eyes of a philosophical observer may be defended by a number of concurrent circumstances, is nevertheless an important object to the government, which in the increase of the revenue obtains but a very lamentable compensation for the loss it suffers in the numbers, strength, durability, and service of its subjects. We have heretofore endeavoured to give a sensible representation in figures of the worst side of this loss by a calculation in all probability not exaggerated; no farther remark is therefore necessary here for rendering more apparent the extent and the effects of this evil. Indeed the government, by mere ordinances, can in this matter do little or nothing: the total privation of a liquor really wholesome to the northern countryman would be in many respects impracticable, and would be scarcely advisable were it even possible. The result of the matter then is this, to endeavour at some means for setting bounds to the intemperate use of it; and this is not the work of ten or a dozen years. To alter the manners of a people requires greater and more powerful motives than can be brought into action within the space of one generation. Laws, religion, and education are certainly powerful means, when they combine to one general aim; but their effects will not be visible till the second or third generation; and even then only under the pre-supposition that civil prosperity has elevated in the great body of the people
the

the sentiment of human dignity, and called forth an inclination for the nobler satisfactions of life*.

Forced and unequal marriages are likewise a hindrance to population, which the government should oppose as far as possible. It is well known to be not unusual among the common people in Russia for a young lad to connect himself with a much older woman, for the sake of bringing into the family one person more that is able to work; an evil arising for the most part from the covetousness of the father, and besides the detriment it occasions to population has also a pernicious influence on morals. — In many parts of the country, where the boors pay their lords a pecuniary tax, in return receiving passports with which they may follow their trade all over the empire without molestation, the emigrations occasioned in this manner are the cause of unfruitful marriages. A part from his wife for whole years together, the countryman roams about the distant provinces, till the best years of his life are over; and the state not unfrequently loses all the benefit that might reasonably be expected from such

* See two excellent treatises relative to this subject; *Revolutions in the diet of Europe, for these three hundred years past*, by professor Leidenfrost; in *Schlœtzer's literary correspondence*, tom. viii. book 44, p. 93. — and pieces by the court-counsellor Michaelis of Gottingen, on the methods of weaning a nation from brandy; in *Schlœtzer's book* which we have so often quoted: *On the innoxiousness of the small pox in Russia*.

an union *. — Sometimes hard-hearted noblemen refuse to let a young woman marry when her suitor is a youth belonging to another estate, or only consent to such a marriage on condition that she bring another girl in her place, or pay a compensation in money. — In some provinces it was formerly the custom for people who were desirous to marry, to ask permission of the governor or commander of the town, for which they were obliged to pay a fee either in money or in cattle †. This pernicious and oppressive practice, however, Catharine II. entirely abolished by the manifesto of grace of the year 1775. — The purchase of wives, which is customary among the Samoyedes, the Ostiaks, the Mordvines, the Tschuvasches, Vogules, Tunguses, Votiaks, Buræts, and several other tartarian tribes, cannot be so easily suppressed, as an old national practice to which uncultivated people are known to be attached with a sort of religious reverence; yet there are some races, for instance, among the Tartars, who have voluntarily and of their own accord relinquished this infamous traffic ‡. — The question, whether the polygamy of the mohammedan and heathenish nations be favourable or detrimental to population, can scarcely be solved with any certainty, as no lists of births and deaths are kept in unchristian coun-

* Instruction for framing a code of laws, sect. 269 — 271.

† Hupel's political constitution of the russian empire, tom. i. p. 599.

‡ Pallas, travels, tom. iii. p. 400.

tries ; it is however a problem, the solution whereof cannot be uninteresting to the state.

The clergy in Russia, it is well known, occasion no remarkable disadvantage to population, as all secular priests, and consequently by far the greater part of that body, are at liberty to marry. The celibacy of the monks is by the wise restrictions of the monastic life upon the whole of no significance. — Far more sensible, on the other hand, is the loss which population sustains by the soldiery. So long as war continues to be a necessary evil, this detriment cannot indeed be entirely annihilated : but its noxious effects may be greatly mitigated by prudent and humane regulations. The loss of men in fighting against the enemies of the country is a sacrifice made by the state for the preservation of the whole, and for which it is compensated by advantages which in a short time repair the population again ; but the loss which the army sustains in levying recruits, in quarters of cantonment, in hospitals, and on marches, is attended with no compensation to the state, and therefore can never be guarded against with sufficient precaution. — The regulation which aims at reducing the celibacy of the russian armies and fleets is highly worthy of imitation. A great part of the soldiers are actually married ; several border-regiments and garrison-battalions have pieces of land allotted to them for their support in lieu of pay, or in addition to it, where they are at once useful to agriculture and to population. According to an estimate made some years ago, it was reckoned that

that in the field regiments alone and a few garrisons, about eighteen thousand sons of soldiers are taught and maintained at the expence of the state in schools appointed for that purpose* ; similar institutions are kept up for all the regiments of guards.

Lastly, the hard treatment to which the children of the common people are exposed in their early infancy may be reckoned among the general impediments to population. True it is that they are steel-ed and hardened by this means for the maturer age against the changes of climate and the vicissitudes of weather, to perseverance, to toil, and patient suffering ; but what numbers of them perish in the seasoning, whose weaker frame would have been just as useful to the state ! Nor did this remark escape the discernment of Catharine II. “ The boors,” says the Instruction †, “ have, generally speaking, “ twelve, fifteen, to twenty children by one marriage ; but it rarely happens that the fourth part “ of them reach maturity. A fault must therefore “ necessarily lie somewhere, either in regard to “ nourishment, manner of life, or education, by “ which this hope of the country is cut off. In “ what a flourishing state should we behold the empire, if by wise institutions we could obviate or “ prevent such a destructive evil !”

* On the population of the russian empire ; in Hupel's northern miscellanies, tom. i. p. 125.

† Instruction for framing a code of laws, chap. xii. sect. 266.

These may perhaps be the most general and most material impediments to the progress of population. Against most of them the government has endeavoured to apply the most effectual remedies ; but institutions, abuses, and habits, which have become inveterate by the practice of successive ages, are not to be rooted out in the space of a small number of years. No prince in modern times has ever made the subject of population so intimate a concern of government as the late empress. From the first moment of her reign it was one of the favourite objects of her great and active mind. Not content with having ensured the preservation of the inhabitants, and weakened or annihilated the obstacles to population, she moreover applied millions of rubles to the purpose of rearing useful burghers in the empire, and TO INCREASE THE POPULATION BY AN ACCESSION FROM WITHOUT. — This method, the most difficult and tedious of all, was however not solely directed to so simple an end ; by the acquisition and distribution of industrious people of good morals, the seed of a superior civilization would naturally at the same time be sown among the inhabitants of those waste regions where it grew up and flourished under the benign and fostering sceptre of that monarch. The account of that remarkable creation is too interesting a fragment of the history of civilization in the russian empire, to be here passed over in total silence.

So early in her reign as December 1762, Catharine the second published a manifesto, inviting foreigners

foreigners upon advantageous terms to come and settle in her dominions. In July 1763 the empress constituted a tutelary chancery for the protection of foreigners, invested with equal privileges with the other colleges of the empire. The main design of this institution was to take the foreigners into its protection immediately on their setting foot in Russia, and forward them according to the directions contained in the manifesto, to the place of their destination. It received annually two hundred thousand rubles, which, besides the purchase of a building for the use of the chancery, was to be solely employed in providing seed-corn, cow-houses, implements of husbandry, &c. for the colonists, and in the erection of manufactories. The tutelary chancery were enjoined to procure intelligence concerning all waste and untenanted places, to direct the construction of new establishments, to watch over their maintenance and advancement, and accordingly to keep up a correspondence with the russian ministers at foreign courts. They afterwards received an exemption from all responsibility excepting to the empress herself.

Shortly after a second manifesto appeared, more accurately defining the advantages and gratuities under which foreigners were invited to settle in the russian empire. As this state-paper has been adopted as the basis of all later colonizings, and the precepts contained in it form in some degree the civil constitution of a numerous and by no means insignificant class

class of people; it will not be superfluous to give here its most material particulars in a short abstract.

Foreigners of all denominations may settle in whatever part of the empire they please, and to that end need only apply either directly to the tutelary chancery, or in the frontier-towns to the governors and commanders. If their means be not competent to the journey, they will be furnished with money by the russian ministers and residents at foreign courts, and conveyed at the imperial expence to Russia. — Exemption from taxes for a stated time, which, according to the standard of utility in the colonies, is set down at five, ten, and thirty years *; free dwelling for one half year, dating from the day of arrival. — To those who intended to follow the farming business or some trades or manufactures, a tract of arable land adequate to their purposes is allotted, and all necessary advances at their setting out. For the erecting of a dwelling-house, for the purchase of live stock, implements, vessels, and other materials, the necessary money will be advanced without interest from the imperial coffers, which after the expiration of ten years is to be paid at three several instalments. — The internal constitution of their jurisdiction is left to the option of the

* Most of the colonies, however, after that time was elapsed, had a farther grant of immunity from all taxes of whatever nature, for the same number of years as before.

colonists who establish themselves in whole villages ; but always in submission to the common law of the empire. — Importation of property duty-free, and even a quantity of commodities, the value of which for a family shall not exceed three hundred rubles. — Exemption from civil and military service. — Refreshment-money and travelling expences from the frontiers of the empire to the place of their destination. — Free sale and exemption from duties for ten years on the exportation of all articles in the colonies which have not hitherto been produced or wrought up in Russia. — Foreign capitalists who set up fabrics, manufactories, or workshops, may buy as many boors and vassals as are requisite to their undertaking. — The colonies may keep fairs and markets without paying any toll. — All these advantages extend also to the children of the new settlers, even though they be born in Russia. Their years of exemption are to be reckoned from the arrival of their parents or ancestors ; after the expiration whereof they are all bound to pay the taxes and services that are customary in the country : those who are desirous of quitting the empire are at liberty to do so, but on condition that after a stay of five years they pay the fifth ; after having been settled from five to ten years, the tenth part of the property they have acquired in the country, into the imperial treasury. Whoever requires distinct privileges, beyond what are granted in the manifesto,

festó, may apply for that purpose to the tutelary chancery*.

These invitations and advantages have drawn a great multitude of foreigners, particularly Germans, into Russia. The parts in which they settled to the largest amount were the governments of St. Petersburg, Voronetch, Tchernigof, Ekatarinoslaf, and Saratof. The most numerous colonies fixed upon the last of these on both shores of the Volga and the Medveditza; on which account it was found necessary to erect there a comptoir of the tutelary chancery. After the introduction of the new vice-royalties this department was however abolished as useless, and all the colonies were put under the common jurisdiction. On this occasion the empress remitted to the colonists of Saratof, who, on account of the inconveniences they experienced from their situation and the unsuitableness of the soil for the purposes of agriculture in the parts where they had settled, had been obliged to remove to other districts, the whole of the expences of building their houses, amounting to the sum of 1,025,479 rubles†.

The colonists in the government of Saratof mostly took to agriculture and the breeding of cattle; yet they have among them many expert handicraftsmen, who have settled in the neighbouring towns, where their exquisite workmanship procures them an ample income. But the little

* Manifesto and ukase concerning the tutelary chancery.

† Ukase bearing date the 20th of April 1782.

manufacturing town of Sarepta, built by the evangelical brethren, or Moravians, is in an eminently flourishing state, the neat pieces of workmanship executed there being disposed of over all Russia; on which account they have also established considerable warehouses in St. Petersburg, Reval, and several other towns. — Since the abolition of the tutelary chancery, the colonists, as debtors to the crown, are under the superintendence of the office of exchequer; but matters of police and law are decided by the circle-magistracy and other courts. Each colony has, besides, what is called a colony-court, consisting of a president annually chosen by the community, with some assessors and elders. The ecclesiastical constitution is framed upon the mode of religion which each colony professes; they consist of fifty-seven lutheran, thirteen calvinistic, thirty catholic, and one mixed. The five lutheran and the three calvinistic clergymen, are under the authority of the college of justice at St. Petersburg, which hitherto supplies the place of a chief consistory; the four catholic priests, one of whom is always superior, are dependent on the archbishop of Mohilef. All the colonies in the government of Saratof, amounting to a hundred and one in number, contained in the year 1790 together 5624 families, which consisted of 30,932 persons*.

In

* Heym's Encyclopædia of the russian empire, p. 137. — Former but very circumstantial accounts of the colonies on the
Volga

In the government of St Petersburg the colonists chiefly follow agriculture and gardening; as the products of their industry fetch a good price in the residence, accordingly they all live in easy circumstances. In the government of Tchernigof, where their number amounts to about three thousand, they form five villages, having two churches, one served by a lutheran, and the other by a catholic divine. — But no where is the mixture of nations more motley and curious than in the government of Ekatarinoslaf, which is more than half inhabited by colonists. We meet here Germans, Swedes, Italians, german Mennonists, Greeks, Bolgarians, Serbians, Arnauts, Albaneses, and Armenians. The last particularly are not only the most numerous, but likewise in many respects the most useful of the colonists of these parts. When the peninsula of the Krimea, in the turkish war preceding the last, was harassed by intestine commotions, these laborious and peaceable people petitioned for protection and an asylum in the russian territory; the empress granted them both, and thus arose the flourishing colony at Naschitschevan, which now holds no inconsiderable a place among the industrious manufacturing towns of the empire.

Besides the great number of foreign settlers who came to Russia in consequence of the above-men-

Volga may be seen in Pallas's travels, tom. iii. p. 608—618. And of the colony of the moravian brethren at Sarepta, id. ib. tom. iii. p. 560 to 567.

tioned invitations, and were there established at the expence of the state, the reputation alone of Catharine's wise and benign administration annually attracted a very considerable number of foreigners to her dominions. A country which affords so many resources to industry; in which it is always very easy, with any degree of diligence and merit, to arrive at respect and competence; where a complete toleration and an almost unbounded freedom of trade subsist, and where the government so willingly receives every foreigner:—such a country as this must naturally, amidst the oppressions and shocks which are felt in a great part of Europe, be a welcome refuge to thousands of mankind denied protection or bread in their own. Indeed this slow and scarcely perceptible increase which the population of the russian empire receives from year to year, is far greater than would at first be imagined, and enriches not only the countries on the coasts, but even the inland provinces of the empire.

Many other means successfully employed by the administration for augmenting the mass of people must be here passed over in silence, in order not to entangle ourselves in too circumstantial an account. Among these are the encouragement and multiplication of the branches of livelihood, whereby the number of persons in good circumstances is increased as the most effectual incitement to matrimony; also the useful occupation of criminals, who, instead of being rendered unserviceable to civil society,

are either employed in the public works or in the colonization of desert regions. This latter method, which has been practised in modern times by England with great success, has been long pursued in Russia, to the very material benefit of the population of the empire. There, in the milder regions of Siberia, where the teeming but uncultivated earth is obliged to confine within itself its luxuriant riches, the exile, who by his vices or crimes has forfeited the protection of society, finds a fresh opportunity for becoming happy himself, and useful to the community, by a numerous and better progeny. Like the other colonists the state provides for these unfortunate beings, by furnishing them with the means of future comfort. On their settling they are supplied with money and materials; and for the three first years receive also an ample store of provisions. — In consequence of these wise and humane principles Siberia throughout has already gained much in culture. “If we consider,” says an eye-witness of these useful colonies *, “that Siberia, not quite two
“hundred years ago, was a wilderness utterly un-
“known, and in point of population was even far
“behind the almost desert tracts of North America,
“we may justly be astonished at the present state of
“this part of the world and at the multitude of its
“russian inhabitants, who in numbers greatly exceed
“the natives. Certainly, as the discovery and rapid

* Pallas, travels, tom. ii. p. 513. tom. iii. p. 7.

“ conquest

“ conquest of so enormous, unknown, and perfectly
“ savage a tract of country, from the Ural to the
“ eastern ocean, must remain an everlasting monu-
“ ment of the genius, the intrepidity, and persever-
“ ance of the russian nation: so much have we
“ reason to admire the peopling of it as a master-
“ piece of political wisdom !”



THE END OF THE FIRST VOLUME.

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